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Issue 6 March 1991 £1.95

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Screen shots from various formats

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Martian Dreams: total recall at the CES

London, 15/2/1991

Credibility gulf (1)

The Gulf war has had an interesting impact on the marketing strategies of games companies. Specialist wargame publishers like Victory and 3W have sought to exploit/simulate the conflict by revising existing products such as **Gulf Strike** (Victory), or rushing out games like **Arabian Nightmare** (3W). The former game even had a picture of the now 'evil dictator' stripped into the original cover art. Milton Bradley on the other hand, takes an entirely opposite view. Lurking on the bottom right hand corner of the cover of **Fortress America** is a picture of the Iraqi leader, combat ready and all. However, the latest editions now being shipped show a figure of similar shape, but now sporting a pair of designer sunglasses and a Club Med tan. MB apparently decided 'a year ago' that Saddam was becoming a hot potato and, ever anxious to protect the company's image of purveyors of all things pure, decided to apply the airbrush. No doubt it also helps to erase the rather awkward memory for the Americans that Saddam, like Noriega before him, was once one of their own.

Fortress America was also the subject of a piece in *The Guardian* (where else?) by some bleeding heart liberal who went looking for toys suitable for his 18 month old child, and all she could find, surprise, surprise, were 'war toys'. Among these was the MB game which was described as being among the 'uglier stuff', and one which 'reinforced enemy stereotypes'. Her kneejerk whining conveniently ignored the fact that it is described on the box as being suitable for ages '12 – Adult'. The only thing the article showed was the ability of journalists to write a story first, and then grub around trying to find a few 'facts' to support it. The *Daily Mail* ran a shock horror story a few years ago about a Falklands wargame. The only difference between that and the aforementioned tale is that the *Mail* did not even bother with the pretence of fact checking.

Anybody reading this magazine probably doesn't need us to explain the rationale behind most wargames, or point out that wargamers come from all shades of the political spectrum. *Strategy Plus* has no problem publishing reviews of **Gulf Strike** or Intergalactic's **Desert Storm** scenario, even though the magazine is editorially opposed to the war. Like the games themselves, the magazine is making available empirical data which readers will make of what they will. The line would be drawn, however, at games like **Attack Iraq** (seen recently at the CES) – a mindless and unedifying action game, the title of which speaks louder than a thousand graphics.

Once the war is resolved it is hoped that software houses will not jump on the bombing bandwagon, if only out of respect for the Iraqi dead. At the time of writing the evening news often resembles a video game: crosshairs, explosions, followed by military doublespeak, dominate the screen. Only this time it's for real. This is one scenario which this magazine would *not* like to see simulated.

Credibility gulf (2)

In our last issue we stated in the review of **UMS II** that 'the game allows you to design your own maps and armies, of course, as in the original **UMS**'. This is not strictly true. The Planet Editor, which is necessary for the creation of new scenarios, is not included with the game. This will be available at no extra cost to legitimate users as soon as it is finished (ETA: mid March). Our reviewer considered that the game was excellent value on the basis of the three scenarios that come with the game. This opinion still holds good. Our apologies, though, for any confusion that may have arisen as a result of the article.

Credibility gulf (3)

Mr N Williamson, currently resident in Saudi Arabia, writes to thank us for sending him our 'excellent Scud proof and chemical resistant magazine'. He also requests that we reroute the mag to his UK address because 'it's hard to think wearing a gas mask'. Quite. It must be awkward reading the manuals too. We would like to wish Mr Williamson, and indeed everybody involved in this wretched conflict, a safe return to life as we know it. SP

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WARLORDS

Fantasy From Down Under

by Steve Jackson

THE MOST USED title in war-gaming history reappears yet again in this multi-player war/fantasy/strategy game from Strategic Studies Group, an Australian computer game design house. The box graphics and art are about as imaginative as the title, but read on. This game is living proof that you just can't judge a game by looking at its cover.

A fictitious medieval world is inhabited by eight different 'races' of humans and near-humans. You control one. Your object is world domination. You start with a castle and a Hero. Each turn, your starting castle (and any others you have conquered) produce new army units. Some you move. Others you move *and* send into battle.

When all your units are 'pooped' (no movement/combat left), you tell the computer you've finished your turn and it operates the other seven races. This continues until you rule the world or it rules you. Conquering the world is a feat which will take many hours.

Horse Lords And Heroes

A familiar theme? Maybe. But there's plenty more to **Warlords**. For a start you have a choice of eight 'races': Dwarfs, Elves, Orcs, Horse Lords and the like. Each has its own characteristics. The Elves cut through the forests (which stop everyone else dead); the Dwarfs move across hills with relative ease. Lord Bane starts in a secluded area completely ringed by mountains. So when you've mastered the game as the Elvallie (a race of Elves that the manual suggests you start with), try playing as the Grey Dwarfs.

The game can be played by up to eight players. This is a horrendous prospect as waiting for your turn would be excruciating after an hour or so. And in my opinion face-to-face games are much better played on a board. But if SSG ever feels inclined to develop **Warlords** further, I could see it being an excellent PBM game.

Heroes are special units. Not only do they boost the morale of troops in battle, but as your campaign continues, they 'explore' the world looking for gold and special treasures. They can visit libraries and talk to sages to find out where the particularly valuable treasures are.

New Heroes appear during the game and offer their services to you at a price. If you take them on, they bring their powerful friends with them – Dragons, Wizards and the like. Thus the game becomes a combination of strategic wargame (moving troops into position and fighting battles) and adventure game, as you send your Heroes off to explore Temples, Tombs and Magical Monuments looking for Swords, Orbs and Staffs (which have advantageous strategic effects).

Warlords is easy to get into. The 'Tutorial' section, which runs to about a page of rules, allows you to load up, take charge of the Elvallie and fiddle about with your Elves for a couple of hours while you are learning more about how it works.

The graphics are above average. The main game screen is divided into two sections: on the left is the area immediately surrounding the current unit you are dealing with. On the right is a tactical map of the whole game-world. As the cursor moves across from left (close-up) screen to the right (world), it turns into a magnifying glass. Clicking on the magnifying glass brings up a close-up of that part of the world. Down the central divide between the screens are gadgets for selecting the most important commands (move to next unit, take control off current unit and so on). More commands are available through the menu bar along the top of the screen. And along the bottom, various items of information appear depending on what you're doing.

Multi Player Mayhem

In common with most strategy wargames, the combat system is not particularly exciting. The computer works out basic strengths, adds modifiers and then rolls a random number. Don't be afraid of attacking a well-defended neutral castle with a single unit. You wouldn't believe the number of times this proves successful!

A most impressive feature of the game is the artificial intelligence routines. As an example: highlight a unit, click on where you want it to move to and the computer works out its most efficient way of getting there (using roads if practical) and moves it for you. Not only does this save a lot of time, but it also makes you 'feel' more like a commander. 'Okay, lads. Head east to Hereuth. I'm sure you can work out the best way to go...' Very useful.

Also, apart from the occasional suicidal enemy light infantry unit that for some reason decides to challenge five of yours single-handedly, the computer-controlled opponents all act in a reasonable way. In one game I was amazed to find that my home cluster of castles – which I had assumed was safe because it was miles away from everyone else and sheltered by an almost impenetrable mountain range – was suddenly under attack from a Dragon sent by the Dwarfs, whose start is on the other side of the map! What were they doing over here? Was this a dumb move by the computer? No. As the Dragon can fly over mountains and is incredibly powerful, all it had to do was fly in and wipe out all my garrisons to create a new Dwarven sub-empire which would take me too many moves through the hills to recapture. Smart.

Warlords is excellent. It is easy to get into. The graphics and sound are good. The game is fast paced and will hold your attention for many hours. Definitely one to be had. SP

Designed by
Steve Fawkner, Roger Keating, Stephen Hart and Gregor Whiley

Published by
SSG

Price £34.99

Available for PC and Amiga
Reviewed on the Amiga

EGA, VGA

ELITE PLUS

Updated Space Classic

by Marcus L Rowland

OK, LET'S begin with the easy bit. This game is **Elite**; the Plus indicates that the PC version has finally got all the bells and whistles that Atari and Amiga owners have had for a couple of years. You know, the pretty pictures of aliens that look so nice on the outside of the box, and aren't there when you try running the game on your PC. It's a new version of one of the oldest (and in my view, one of the best) space-flight simulation games. For the sake of simplicity I'm going to try to refer to the new version as **Elite Plus**, or use the generic term **Elite** when I'm referring to the original or both versions.

If it isn't a new game, why are you writing a review?

Strategy Plus and its ancestor *Games International* have never reviewed any version. Come to that, you have to go back two or three years to find a review in any magazine. Originating on the BBC B in 1984, and soon ported to Sinclair Spectrum, the first PC release was in 1987, when most PCs cost well over a grand and the exciting new Amstrad 1512 cost a mere £799 with CGA colour and twin 360k drives. **Elite** ran in 4-colour CGA mode, and the first production run sold out in a matter of weeks. There have subsequently been releases for Atari and Amiga, Amstrad PCW, and probably a dozen other machines I haven't noticed. I don't know of a Cray version, but it may just be a matter of time.

Elite Plus offers a good deal more than the earlier PC **Elite**, but CGA graphics aren't part of the package; if you still use CGA you'll have to stick with the older version, and there's also no Hercules support.

What is Elite anyway?

I suppose it's remotely possible that someone out there has never heard of **Elite**. Unlikely, but possible. Please feel free to skip the next few paragraphs if you already know the game backwards.

Elite is a space flight 'simulation' (for want of a better word) in which the player is pilot and owner of a Cobra Mk III starship. The Cobra is initially armed with three missiles and a forward-firing pulse laser, which is just about capable of taking out an enemy ship if you get really lucky.

The ostensible idea of the game is that you should ship cargo and sell it, gradually exploring the game universe, building up your fortune, and buying new equipment to upgrade the ship. In practice most players get their money from combat, because it's hard to avoid and bounty hunting pays really well if you can stand the pace. Friends tell me that trading can pay even more, but I'm not sure I believe it.

Equipment available includes fuel scoops (usually used to eat your enemy's debris and/or his cargo after combat), ECM gear, better weapons, a bigger hold, invisibility, and so forth. All of it costs enough to ensure that you appreciate it when you can finally pay for it. As you progress in the game your rating gradually improves, from Harmless to Average, thence ultimately to Elite and the coveted Archangel. It can take a very long time, especially if you're trying to run the game from a keyboard.

As well as normal 'trading' runs you're occasionally thrown into extra-dangerous scenarios, usually involving the Thargoid invaders who threaten to devastate the cosmos.

Elite offers a really big game universe: 256 systems per galaxy, eight galaxies per game. It uses convincing controls for true three-dimensional movement, where many other spaceship games use an arbitrary horizontal plane and don't allow a full range of manoeuvres. Radar is also three-dimensional, referenced to the ship's attitude. If a target is 'above' the flight line of the ship it is shown as a line rising out of the screen, if below it's shown as a line dropping down. Lines end in a little cross bar to avoid confusion. Instruments show fuel, temperature, altitude near a planet, speed, and the condition of your shields.

So what's new?

Elite Plus comes on one 720k or two 360k floppies, with a total of 410k in five files. Although at least five times larger than the original core program, it looks positively tiny after **Lightspeed** and other recent games, a reminder that it's still possible to write good software without endless megabytes of files. It can be run from floppies or a hard drive. There doesn't seem to be any copy protection, but the draft manual I was sent includes the cryptic note 'Novella protection???', which suggests that the final release will have some form of log-on screen.

Colour is well-supported, and much the best in 256-colour MCGA mode. Sixteen-colour EGA and VGA are also supported at MCGA resolution, but MCGA is much the prettiest. The vector graphics use solid colour, not the wire frames or dithered shades of earlier versions. They are extremely fast; in fact, speed may be the Achilles heel of this version, because there doesn't seem to be any way of fine-tuning game speed to match the player's reflexes, and I'm not altogether sure that there is adequate compensation for processor speed. On my 16Mhz 386 it seems to run a little faster than the previous version at maximum speed; I don't find that a problem, but I've played **Elite** for four years and may be acclimatised.

Dropping down to 8Mhz made the game seem a little too slow, and I'd guess it's at its best at 10-12Mhz. I know someone who's buying a 33Mhz 486 soon; somehow I doubt

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Bell & Braben

Published by
Microprose

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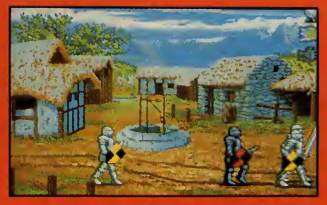

IBM PC VGA SCREEN SHOTS SHOWN

Virgin GAMES CONCEPTS

IMMACULATE

that this game will be playable on that system. On a more positive note, an extremely useful change is immediately obvious; radar targets are now colour coded according to type.

Sound is supported through the PC speaker, or via Roland or AdLib cards. Even with the speaker sound is adequate, as good as the earlier PC version; with a sound board the tones are much richer. The title theme (The Blue Danube, as if you didn't already know) has rich orchestral effects, and all the incidental noises of the game are enhanced, unlike some games which use a sound board for music but generate effects through the internal speaker.

Game play is largely similar to the older PC **Elite**, but there are important differences in control organisation and instrumentation. Most secondary controls are now assigned to function keys F1-F12 (or 1-9,0,-, and = if you don't have twelve function keys). Some keys have multiple functions, which can be a little confusing until you learn the game. For example, you use F7 to arm a missile; you can't disarm until you've locked onto a target, at which point you can either fire (F8) or disarm (F7 again). F5 toggles between the four views (forward, aft, left, right), rather than keys F1-F4 letting you choose views in any order. Hyperdrive operation is now much more complex; pressing F4 puts you onto the navigational screen, F8 selects a system and shows you its distance, and F6 starts the countdown to hyperdrive. The original **Elite** let you select a system in advance then return to combat, jumping out by pressing 'H' if necessary. This change makes it more likely that you'll suddenly realise you need hyperdrive, but make a mistake when you try to use it. Once I used F4 to select the navigation screen, moved the cursor to a system, then pressed F6, without the vital step of pressing F8 to lock on. The result was that I got shredded while trying to work out what had happened to the countdown. The only reason I can imagine for this change is to make the **Elite Plus** controls compatible with versions for other machines. Fortunately the screen includes a row of instruments, tiny panels showing the options available from the function keys, changing in different modes. At first I thought that they made the main viewscreen look a little cramped, but I measured the images and in fact the new version is slightly larger. The mini-screens actually pinch some room from the main flight instruments, but in practice the only one that suffers from the change is the thingy that shows the direction of the nearest spaceport; it's now slightly insensitive. I didn't like the new instruments at first, but they soon grew on me, and made the new keys a lot easier to understand.

One welcome innovation for inexperienced players is a new version of automatic docking. This lets you dock under spaceport control, as though you had a docking computer. There's one tiny snag – the spaceport charges fifty credits! Incidentally, automatic docking is activated by F1, and the fee is charged as soon as the button is pressed; if you're familiar with the older version, and in the habit of pressing F1 to get the view ahead, this can be expensive. In general manual docking and other manoeuvring seems to be a little easier than in the old game, possibly because the ship seems much more responsive. This is fine with joystick control and reasonably good with keyboard control; mouse controls are ridiculously frisky, making it almost impossible to set course or aim properly.

Most of the other innovations are related to graphics. The planetary information screens now show pictures of the natives, the planet, and other details, the ship status display includes a picture of the ship, and so on. This aspect of the game works extremely well. Another important plus is improved and extremely fast game saving and loading.

OK, so what doesn't work?

In general I've no complaints, apart from the speed problems I've already mentioned, but I did run into one potentially serious problem; my computer sometimes locked up completely if I tried to run **Elite Plus** twice without rebooting, or ran it after using Borland's Sprint word processor. Naturally I found this out by crashing the computer repeatedly while writing this review. I think that this was actually a conflict with 386 memory management software, and rebooting before and after each game cured the problem completely.

If you were thinking of using an old **Elite** commander in **Elite Plus**, forget it; the file formats don't seem to be compatible, though I suspect that someone will eventually write a conversion program.

In all other respects it works extremely well.

And the final verdict?

A qualified hit; qualified because at the time of writing I don't know the price, and haven't seen the finalised documentation. Since the game has been ported to a huge number of machines, and there has already been a PC version, I'd expect the price to be a little lower than an all-new game. Somehow I suspect that won't be the case.

New players should enjoy the game immensely, old **Elite** hands will still have fun, but may occasionally find themselves sighing for familiar controls. SP

NEXT ISSUE

WORLDS AT WAR

BETRAYAL

FEUDAL LORDS

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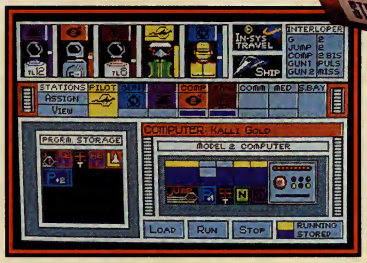

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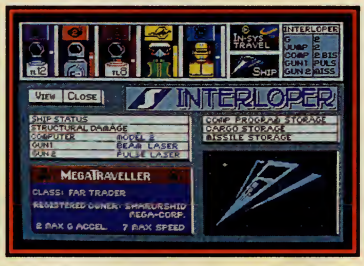

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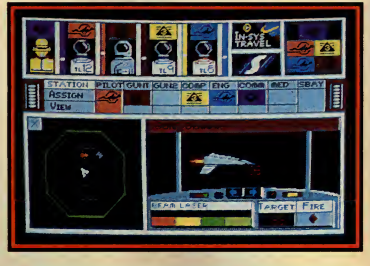

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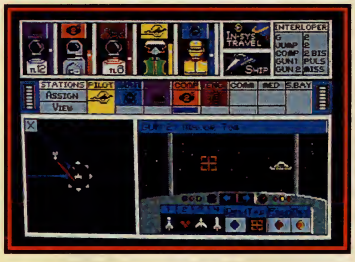

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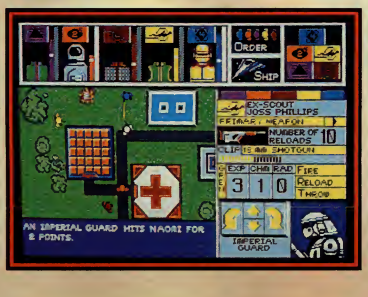

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TYPHOON OF STEEL

WW2 Combat Construction Set

by George Campbell

TYPHOON Of Steel is a game of squad-level combat set during the latter half of the Second World War, involving American, British Commonwealth German, and Japanese units. It covers fighting in the principal theatres of operation: the Pacific, Asia, and Europe/North Africa. It is not just a game though, it is also a comprehensive construction set.

Typhoon of Steel is a sequel to **Panzer Strike**, but obviously you don't need to own its predecessor to enjoy this game. It has much in common with other SSI tactical games such as **Kampfgruppe** and **Overrun**. Familiarity with any of these permits easy learning of the game mechanics, which might otherwise require some effort. The game itself appeared on 8-bit some years ago, and is a very welcome addition to the Amiga fold.

The game map may be up to 60 squares a side, each one representing 50 yards. Heavy tanks such as the Tiger can therefore engage targets just about anywhere on the map, assuming that there's a clear line of sight. The tactical map is in most frequent use during play, measuring 20 squares by 10, but the strategic map, 40 squares by 20, can be called up at any time.

An engagement typically lasts 30 or 60 turns; each turn is equivalent to one minute. Each turn comprises an orders phase and a combat phase; the latter is broken down into three combat pulses. There is no way to access units once the combat phase has begun, even though there are three separate pulses, so it is best to avoid putting units in precarious positions.

There are seven pre-set scenarios: two Pacific, three European and two Asian. These cover a broad range of situations and distinct terrain types, each offering an interesting challenge. Each mission will generally be to hold or clear a particular objective, depending upon whether the Allied or Axis side is chosen. In some cases, such as the Iwo Jima scenario, it is tougher to play the Japanese defenders than it is to play the invading Americans.

Even a relatively short scenario like Peiper on Point may take more than two hours to play. It's not the type of game to reward snap decisions and sloppy thinking. Any scenario with a large number of units takes a long time to finish. For example, Iwo Jima can take upwards of 10 hours to complete if individual moves are properly considered.

Accompanying the 43-page rulebook is a comprehensive briefing manual which provides data on all the units you could possibly want. There are tanks, tank destroyers, howitzers, mortars, engineer vehicles, gun emplacements, a variety of squads, and many more. The Americans have 65 units, the Germans 70, 56 for the British Commonwealth, and a mere 32 for the Japanese. Even so the Japanese are well served, with nine types of tank, five infantry squads, and guns ranging up to a 14-inch naval piece.

Each unit can have up to four weapons, such as a tank with its main armament and two machine-guns. There are 98 distinct weapons, including the lowly rifle, flamethrower, guns fit for a battleship, panzerfausts, and 13 different types of 75mm gun. It is possible, because weapons are not assigned to a specific nationality, to play around with history. It could be interesting to see how the Churchill would have fared with even a modest improvement in its gun calibre.

What's The Point

The Sherman is given the same front hull armour as a Tiger, which I find a little difficult to reconcile. Granted, the Tiger has a much more effective gun, but I believe the basic Sherman has a better performance than it should have. In game terms a Sherman costs 11 points, compared with 25 for a Tiger or Panther. I know that I'd much rather have four Tigers than nine Shermans. Indeed it brings up the question of why the Sherman kept on being manufactured when Allied forces were in dire need of an effective heavy tank. Allocating more R&D effort to the heavy tank might have resulted in a better exchange ratio later in the war, when you could write off three to six Shermans to get a Tiger (and more if the Tiger was commanded by Michael Wittmann).

Approximately five pages of the rulebook is devoted to scenario-building, and is a useful step-by-step guide. Scenarios can be created quickly if detail is not of particular importance, which will probably be the case early on. All aspects of the scenario can be altered: terrain, visibility, objectives, type of engagement, size of the forces involved, and the unit types and their equipment. It is a simple matter to chop and change any of the details, ultimately creating a sophisticated scenario worth saving for repeated play.

The European scenario, Peiper on Point, is possibly the most interesting to play as a novice. It's winter 1944, and visibility is very low. Only moderate forces are involved so the action can be concluded in an evening. Particularly striking is the terrain, most of which is snow-covered, and this lends more authenticity to play.

Bocage Waltz is also an intriguing scenario, though when I first played it my Tigers were eliminated fairly easily by the flimsy Shermans. Perhaps I just won't come right out and admit that the Tigers were under-

Continued on next page

Designed by
Gary Grigsby

Published by
SSI/US Gold

Price £29.99

Available for the Amiga

SHANGHAI II

Dragon's Eye

by Trevor Mendham

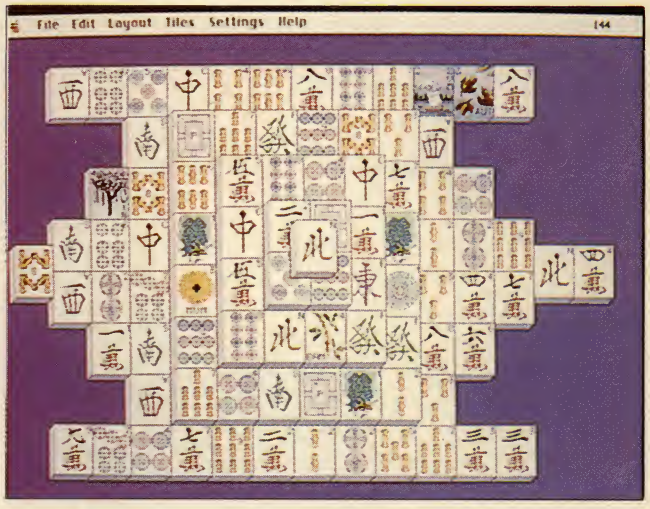
WE HUMBLE reviewers could save a lot of time if allowed to repeat our scribblings. A little while ago I reviewed a game called **Ishido**. While **Shanghai II** is a totally different game, the overall feel, criticisms and conclusion are the same. A game based on laying tiles; a game appealing to pseudo Eastern tradition (you get two marbles in a pouch with the game – called The Dragon's Eyes – they play no part, not even as an anti-copy device); where successfully completing the puzzle gives you a 'fortune cookie'; where a large portion of the manual is devoted not to the game but to the graphics and designing your own tile sets.

Shanghai has been around for a while under various names; there are even public domain versions. As with **Ishido**, it's a game of solitaire. The computer shuffles the tiles (the default set is Mah Jongg) and lays them out according to one of a number of set patterns. The pattern is three-dimensional, with walls of several tiles.

During a turn, the player must find a pair of matching free tiles, which are then removed. The objective, of course, is to continue with this until all the tiles have been removed. What makes this difficult is the fact that tiles can only be removed if they are 'free'. A tile is free when it has no other tiles above it and is able to slide out either to the left or right. Since there are four of each tile (with some exceptions), which pair to take is not always obvious. Clearing the grid without resorting to one of the cheating devices supplied (such as shuffling the remaining tiles) is extremely difficult.

When I first saw **Shanghai** some years ago I was totally hooked for a few weeks. Now that the novelty has worn off, I find it difficult to work up much enthusiasm. As always, good graphics (and they are extremely good, with animated tiles for some of the specials) are not enough by themselves.

The additional element of **Shanghai II** is a game called **Dragon's Eye**. This uses the same tiles but is a two player game. On a smaller grid, one player (the 'Dragon Master') attempts to build a structure, laying one tile at a time. The other (the 'Dragon Slayer') attempts to tear it down by finding matching free pairs on the grid, or matching a single free tile with one in hand. Players take it in turns to draw and then place one tile (although the Slayer can continue drawing and laying tiles for as long as matches can be found). The players score points for laying and removing tiles respectively, these determining the winner after all the tiles have been used. This is considerably more interesting than **Shanghai** and there is scope for some forward planning, although the number of tactics available are limited.



Unfortunately, for some inexplicable reason, you are only able to play **Dragon's Eye** in practice mode (as Slayer) until you have completed a Tournament. A Tournament consist of four rounds, each consisting of one game of **Dragon's Eye** and three of **Shanghai** on different boards. This is very time consuming, and if you are not enthralled by **Shanghai** then it is frustrating to have to go through this process in order to be able to play the better game properly. Had I not been reviewing the game, I doubt I would have persevered.

Shanghai II is very attractive and seems to be very professionally put together, though I have a couple of minor complaints. Be warned that if you wish to use a mouse then you must have the driver loaded before you install the game, or it will not be recognised. Additionally, the game is very memory hungry and if you have several TSRs loaded then it can run out. It is also a shame that a high-score board is only available for the tournament, not for individual games. SP

Designed by
Brian A Rice

Published by
Activision

Price £34.99

Available for PC

EGA, VGA

Typhoon of Steel, continued

used, being retained until they were unable to make an impression on the battle. It drove home the lesson that indirect fire must be orchestrated properly, as it can provide enormous support.

It isn't possible to play certain nationalities on some fronts. Therefore, Commonwealth troops don't appear in Europe, and American troops are absent in Asia. While I can appreciate that there were sound reasons for setting these parameters it's a shame that the limitation does exist.

The computer is a competent opponent, using its units effectively, especially indirect fire and dug-in units. There is also the option of setting a handicap level, to make it even tougher to play the computer. However, I found that playing the Japanese in certain scenarios could be more of a handicap. By careful manipulation of the system it is possible to make the game extremely difficult to win, even though the computer doesn't need much of an edge.

Overall, **Typhoon of Steel** is an excellent game. It must be said that the limited command rules ought to be avoided at first, otherwise it can be frustrating. Once some solid experience has been gained this option is an essential feature of the game. It is without doubt a worthwhile purchase. It accurately reflects the diversity of equipment used at the time, and rewards reflective play. Put simply, you can learn the fundamentals of small unit tactics the hard way. SP

GERMANY TURNS EAST

Strategy in SSI's Second Front: The German Viewpoint

by Hern The Hunter

THIS GAME is playable... by post!' There was a short pause on the dog & bone before I answered, with some caution, 'Well, if you say so...,' followed by another pause before saying, 'OK, I'm willing to try it.' The game in question was **Fighter Command** (Apple). At the time I was involved in selling computer software and one of my customers had rushed round and purchased a copy of the aforementioned game, before I had too much of an opportunity to open the SSI consignment and check all those lovely brand new **Fighter Commands** into the stock. Two hours later he phoned me to propose the 'postal game!'. Nigel has a lot to answer for!

The first six games were played in exactly the same way as any traditional board wargame and before I knew where I was something like 20 games with six opponents were under way (or completed), by the time **War in Russia** (Apple), turned up. It fell in line and somewhere in the region of 30 games with seven opponents were eventually undertaken. When **USAAF** (Apple), arrived it was a natural progression to bring that into line as well. Though in the case of the latter only six games were started with three opponents. It was possible to play these games in this way for the simple reason that the save game routines were in the right places. It was somewhat gratifying to note in a US postal games newsletter that a party located in Canada was looking for an opponent for **Fighter Command** a few years ago.

I mention this facet for the simple reason that it struck me soon after getting down to my first campaign game of **Second Front** that it could also join the ranks of the small number of computer games that do not require a modem to play them. I always considered **Fighter Command** and **USAAF** to be excellent solo games and even better as two player games. After many sessions with **War in Russia** I considered it to be a very poor solo game because of the abysmal AI while at the same time it was probably the very best of the two player games I have played by post.

Ironically, after playing my third campaign game with **Second Front**, I have to say that although the AI is a marked improvement, it still leaves a lot to be desired. Taking every city on the map, bar Moscow, by the last week of September 1942 is not what I would call too much of a challenge. And I consider myself to be little more than an average level player. Having said that, it could well be the very best two player game on the market at this moment.

A few personal observations from the German viewpoint follow.

Like **War in Russia** it is important to smash up as much of the Russian ground and air force as possible on the first turn of the invasion. Unlike **War in Russia** a casualty report is given at the end of each turn so that you can gauge how well you are doing, or not, as the case may be. Aim for at least 8000 Russian Infantry squads on turn one, 2000 guns and at least 2000 aircraft. Three quarters of the latter should be smashed up on the ground. The number of tanks and infantry you take out will depend on how many of the Russian units you can pound into the ground. You cannot get them all but you can chew them up something awful if you attack on a independent unit line, rather than set up combination attacks. On turn one, at least, the Germans have a considerable advantage which, for the most part allows them to get away with attacks of this nature. The Russian is very weak along almost the entire attack line.

The data in the table below is from the first two weeks' attacks in my third game. It should be noted that almost 1000 Russian aircraft were destroyed on the ground by ground units attacking HQs in Week One. The Russian air force is also its own worst enemy. It throws units up to deal with superior German aircraft with higher experience levels and this naturally results in heavy Russian losses.

The German player will find that a considerable amount of reorganisation is required. This should be done while on the move. For example there are too many Infantry Divisions in

	Week 1		Week 2	
	AXIS	RUSSIAN	AXIS	RUSSIAN
Infantry Squads	1721	8043	245	3962
AFVS	260	2083	170	851
Guns	680	2827	112	1476
Aircraft	101	3469	136	1760

Second Front was designed by Gary Grigsby, and is published by SSI/US Gold

It is available for the PC and the Amiga, price £29.99

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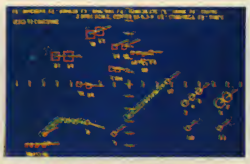
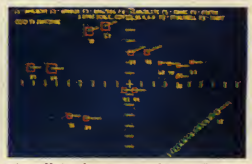


Battlelines engaging, while destroyers lay smoke.

Control guns in automatic or manual modes.



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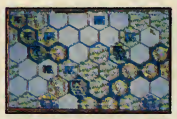

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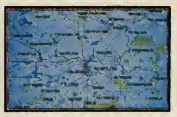

WHITE DEATH: *Detailed map showing battle sector around Velikiye Luki.*

HISTORICAL SIMULATION
A well designed historical simulation is always very satisfying conceptually but all too often extremely tedious in the execution. Storm Computers Ltd, in conjunction with U.S. programmers, have employed advanced personal computer technology to do for wargaming what the computerized spreadsheet did for accounting - most of the work and all of the calculations.

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Artillery supply
Terrain effects
Paratroopers
V-2 Rocket attacks
Play customization
Save Game function
Handicapping system for play balance
Weather Fuel Dumps
Aerial bombardment

HISTORY:
Early in December 1944 America and Britain were awaiting the return of its victorious armies in Europe. But on the other side of the Siegfried Line, Hitler had other plans, launching his last major surprise attack of the war - operation "Wacht am Rhein".

The plan was to quickly strike weakened Allied lines in Belgium and Luxembourg and to break through and move quickly to the Meuse to capture Liege and finally Antwerp. The capture of Antwerp was thought to be essential to postpone the invasion of Germany, giving the Fuhrer a chance to honour his promises of secret weapons which would win the war.

WHITE DEATH

Battle for Velikiye Luki, November 1942

FEATURES:
VERY sophisticated computer opponent
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Weather effects
Bunkers/Tank fright
Morale/Commandos
Rail movement/Rockets
Artillery spotting/Barrage
Headquarters/Garrisons
Unit Identification Support
Play by telephone

HISTORY:
The Russian Front, winter 1942. As the German Sixth Army slowly starves in the devastated city of Stalingrad, the Soviets have launched a second onslaught against the Wehrmacht.
In a communique which Moscow radio broadcast last night the Russians announced their objective: Encircle and destroy the German garrison entrenched at the vital rail junction of Velikiye Luki.

Lieutenant General Perkayev's Third Shock Army, reinforced with three separate corps have been assigned the mission.

It is understood that two under-strength but heavily fortified German divisions plus a number of rear area security and support troops defend the sector. All roads in this near-trackless wilderness run through Velikiye Luki. The stage is set for a bitterly fought battle on the cold snowy wastes of the Eastern Front.

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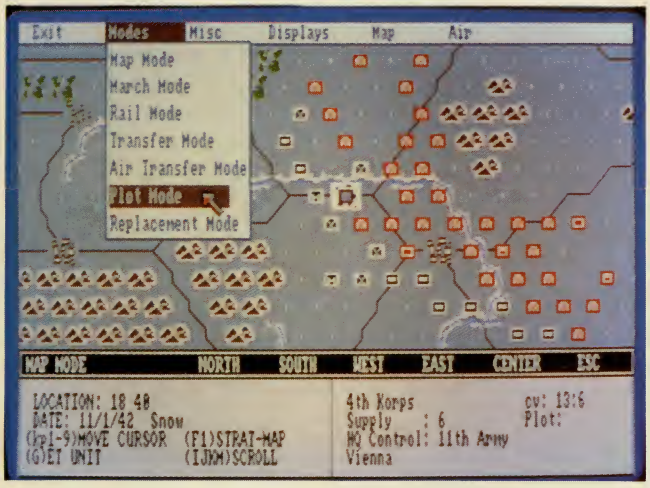
some Korps, and not enough in others. The reorganisation of the bulk of the German armed forces is for a simple reason. If you maintain what you are given at the start of the game when the weather turns bad you will be wondering why you don't have enough Korps to form a solid unbroken defensive line from north to south. Further, your advance will be somewhat curtailed as you will not be able to cover enough ground as you charge hell for leather for your primary targets. Having said that the non-German Axis forces need to be dealt with in the other direction.



The non-Germans are weak, with most of them spread out from just south of Lvov all the way down to Constanta on the south coast. One or two Korps should use road mode to move forward to threaten the Russians in front of them and after moving, while still with turn one, a few transfers should be made. There are just enough Italians to form one strong Korps (including the Italians in Venice), rather than have two weak ones; the same applies to the Hungarians and Slovs. The Rumanians on the other hand have enough units to make up four strong Korps, rather than have six or seven weak ones. In Finland the same thing should be done: three full strength Korps can be formed, but this should be left until Turn Two as the Fins have better things to do on Turn One – like shattering at least one Russian Army; and if you are lucky you can take out two! Shattering is the same as eliminating, or destroying in this context.

As to the regular German Infantry Korps, they should consist of no more and no less than four Infantry Divisions. By doing this the individual Korps will be adequately strong enough to attack and defend and you will end up with enough Korps (including non-Germans), to form an unbroken Infantry Line all the way from Leningrad to the Black Sea coast. While on the offensive you should have the other four slots in each of the regular German Korps filled with one or two JPz or Stug Assault Bn's, one or two artillery or one artillery and one flak. When you go on the defence the JPz and Stug units should be pulled back and replaced with one artillery and one flak or if available one AT-gun and one flak or perhaps a Pz Bn. You will not have enough of any of these units, particularly independent AT-guns which are in short supply, to fill all the slots in all of the Korps. However the bulk of them should end up with at the very least seven slots filled, if not all eight. By 1943 you will not only be able to fill all the slots, you may feel the need to create more Korps to hold all your units.

None of the above includes the Pz Korps or the Security Divisions. The latter have other problems looking after the back door. As you advance, they should fall away to take up static positions in or near certain cities. Minsk, Kiev, Lvov and Odessa (even one in Bucharest), will be required to combat un-welcome activity in the rear areas. You may even require more help from the start of 1942 in combating partisans and the timely arrival of a few Luftwaffe ground units could be used to assist in this area. Once you receive a few new Pz Bn's in 1943 I recommend using three or four in an anti-partisan role in spare Pz Korps – this allows them to move through five hexes, clearing away most of the trouble makers in one turn.

The Pz Korps are fine as they are until the beginning of October. In the first couple of weeks of October the bulk of the Pz Divs should be pulled back to conserve armor for one thing and for building large striking forces. The first week of October 1941 will see the arrival of bad weather. DIG IN! Do not be tempted to attack anything, not even a bombardment, regardless of how weak the enemy might seem because all attacks will result in a lowering of readiness values which are hard to recover in bad weather. Everyone needs a rest. You have about eight weeks before the blizzards in the first week of December signal the start of the main Russian winter offensive.

In the first week of October the bulk of the Pz and Motorized Divs should be pulled out of the line and sent to rest with the three Army Group HQs: North, Centre or South. Incidentally, these HQs should be parked in a city some distance from the forward line, but not too far back, with their replacement levels set at 100. It may take two to three weeks for the bulk of the Pz and Motorized units to recover strength but you have the time and by being in a city readiness recovery is much improved.

With the exception of one of the élite SS divisions, which should be sent to West Front HQ to fill random event requirements for 1942, the rest of the Pz and Motorized units should stay with the Army Group HQs until you find out just where the main thrust of the Russian attacks are going to develop. In short they will become the mobile Fire Brigade to ouse any break in the line. I like to put three Pz and one or two Motor divs in one Korps, with a Pz Brigade and or a few Pz Bns to fill the Korps out. Although tempted to build a Korps with 8 Pz Divs in it to create an exceptionally strong attack force it can also prove to be very brittle and run into trouble at sometime. If the readiness is reduced enough and the unit is cut off...! I dread to think of the drain on the RPL pool if eight Pz Divs have to be rebuilt all at once. Besides it cuts down on your mobility. It's better to have five or six Pz Korps with attack values of around 200 to 300 and some in reserve than to create two or three with triple the strength.

As I have already stated the AI is a marked improvement over **War in Russia**. You can expect attacks just about anywhere along the entire line. Note that according to Gary Grigsby the EVEN setting is for human vs human or computer vs computer play. If you play the computer, you should give the AI some help by changing the play balance in the computer's favour, though this could cause a problem with the play balance. The Axis already have a massive advantage in the early stages of 1941 and giving them even more if you play the Russian is asking for trouble. The same could be said of the Russians in late 1941 and early 1942. I would therefore suggest an EVEN setting at the beginning, giving the AI some help from the start of 1942 regardless of which side the computer is playing.

Holding The Line

Like **War in Russia** a double line of defence is a good tactic. Unlike **War in Russia**, parking weak Korps immediately behind the forward line is asking for trouble. To begin with infantry can move and attack twice, never mind the Tank Armies, when

they become available, with five pluses. Any retreating unit will be forced to fall back over the second line anyway which will cause more fatigue loss to the retreating unit than necessary. Furthermore the second plus attack will no doubt shatter the weak second line unit. The second line of defence should therefore be set up at least two hexes (or more), behind the first line. There will not be enough Korps available to cover the entire line twice so certain key areas should be covered: cities in particular and rail links in general.

Each Korps in the second line of defence should contain no more than one unit. JPz or Stug Assaults Bns, Pz Bns, maybe the odd spare artillery or flak, if any, a spare Security Div or two and perhaps a couple of fresh Infantry Divs pinched from West Front HQ in exchange for the SS Div sent there. You will also have several new Infantry Divs appearing in the west in the latter part of December and more will appear in January. The 24th Pz Div also becomes available around February 1942.

When a Korps from the first line is forced out of its entrenchments it should fall back to end up one hex in front of the second line. In the following week the retreating units should transfer to one of the second line Korps which should be well entrenched by this time. The unit that held the second line can then fall back two hexes and begin digging in again. In short: hedge-hop backwards when necessary, giving up as little ground as possible. It should be noted that the transfer of units will result in some fatigue, but they will be entrenched again and this should make up for the loss of one readiness point.

Having said all that, if your front is well dug in you will find that the Russians will have to make at least two attacks to budge your defenders. Attacks against entrenched units results in heavy losses to the attacker. For example: a dug in unit at level five, comprising 4 infantry, 1 Pz Bn, 1 artillery and 2 flak smashed up 83 tanks, 172 squads and 29 guns for the loss of 2 tanks, 6 squads and 8 guns, though the attacker knocked the entrenchment level down to 2. With air support another force of 4 infantry, 2 artillery and 2 flak managed to smash up 97 tanks, 331 squads and 57 guns for the loss of little more than 9 squads and 11 guns! It is a good idea to 'tidy up' the line in the first week of bad weather, even if it means losing some ground here and there. Making sure that no more than two units can get at most of your defenders is helpful. Though independent attacks against the line are more likely – a single Russian Army, (or even a German Korps), can have a considerable amount of strength, particularly if readiness levels are at maximum.

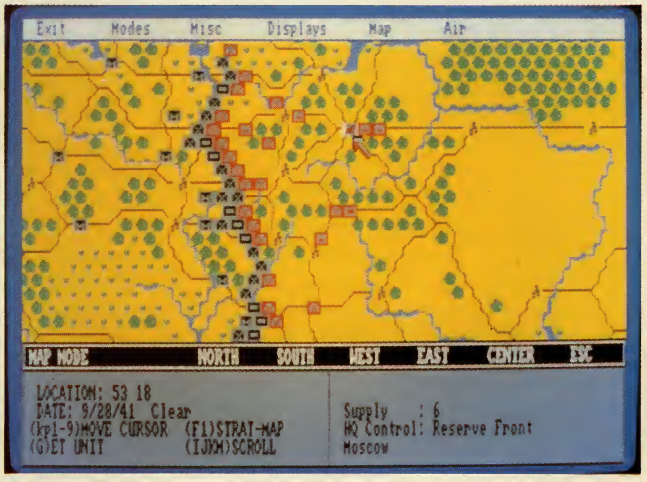
In The Air

The Ju-52s should all end up in West Front HQ at the start of the campaign. Air strength requirements are counted by numbers, not type. By doing this you will be able to transfer a number of fighters and bombers to the Russian Front where they will be more useful, instead of sitting on their backsides in France.

By the time the USAAF begins bombing your cities you should send some fighter Gruppen back to OKW or West Front HQs to assist in dealing with them. In Finland two of the Finnish air units are flying outdated fighter bombers. It is recommended that one is converted to Bf-109Fs as soon as you have enough in the RPL pool and the other should be given Bf-110Cs or Es. An additional Ju-88 Gruppen in Finland would not go amiss either. The Axis forces in the south could also benefit from better aircraft, but any and all changes should be done on a one unit per week rotation as all new aircraft are deemed damaged on the turn of conversion. Of course any such changes will be dictated by the number of available aircraft in the RPL pool. Note that before making any such changes, it would be a good idea to ensure that the old aircraft are sent on a mission first, then feel free to change the aircraft type.

Air units are unaffected by fatigue, so bad weather operations should be conducted as and when allowed. Never give the Russian airforce a chance to control the skies. Smash them up on the ground on turn one and continue to hit them whenever possible during the advance. If you cannot reach aircraft on the ground, go for ground units in cities. By late August, early September, the Luftwaffe should be so strong that the Russian airforce will be conspicuous by its absence until December, or with luck late January, and when they return they will still be dog meat. While the Russian airforce is absent, it's a good idea to send in Ju-88s and He-111s to visit places like Moscow and Leningrad to damage factory production. If you can get bombers over Stalingrad so much the better, but Moscow is a key target in late 1941.

Then we have the Afrika Korps. General Von Arnim surrendered the Afrika Korps and its Italian allies to the British and Americans on 12th May 1943. In game terms it might be a good idea to strip the Afrika Korps HQ of all the German units in the first week of May 1943, or, taking no chances, the last week of April 1943. These units should be sent to Berlin for a rest. If you do not do this you will have to rebuild them. As it is the Italian ground units will be lost anyway and the air units (which suffer from heavy losses), will disappear when Italy is invaded. First, there is the short term defense of Sicily. You should consider pulling out from there at the last minute for the same reasons. Once Italian Front proper is set up you can then safely transfer any necessary armor and infantry back into Italy to defend it.



Finally

Reinforcements, as opposed to replacements, are received on a historical timetable. There is no order of battle provided, which is a bit of a pain as I find myself looking at the main HQs every turn and even calling on certain other HQs from time to time. Unlike the Russian who receives all reinforcements and replacements through RVGK HQ, the Germans will find that although OKH and OKW are the main source of new formations, West Front, Italian Front, along with the Army Groups will provide new units at some point in time. Even the non-German Axis HQs will receive new units at the beginning of January 1942. SP

Next issue Hern The Hunter discusses ***Second Front*** *strategy from the Allied point of view.*

THE ART OF AI

One of the main complaints regarding software strategy games, according to our readers, is the indifferent quality of computer opponents. Ever anxious to tackle the things that really matter in life we asked two of our brainiest writers to investigate the inner workings of these much abused, er, things. ***Matthew Stibbe*** *leads off with a discussion of AI past, present and future.*

ARTIFICIAL intelligence (AI for short) is probably a misnomer for artificial stupidity. In every sphere AI has barely managed to simulate a tiny portion of something resembling human intelligence. At best it can provide rough and ready decision making, pattern matching, or language processing facilities. These are all used in computer games to provide a computerised opponent or opponents for a human player. In this article, I hope to give a brief overview of some of these techniques as applied to computer games, highlight some of the problems associated with them, and finally discuss some of the new AI techniques that have not yet been used in computer games, but which promise to revolutionise them.

Zork: disguished verbs

Space Invaders

There are three broad techniques used in computer games: pattern matching, decision making, and natural language processing. The first is most often used to provide information for the second. A typical example would be the examination of a computerised battlefield map to discover where the enemy units are. A good example of pattern matching is in SSG's game **Panzer Battles** where the computer will draw a front line for you based on the locations of your units and the enemy's.

A more subtle example might be in a flight simulator, in which the computer will work out the spatial relationship between your aircraft and its own, and apply some pattern to that relationship to work out how to manoeuvre into a better firing position. The second major technique – decision making – is central. All games are essentially about the allocation of resources (time, units, strength, food or whatever), and typically the best allocation of resources wins the game. The most basic, and classic example of this is in Space Invaders when the player has a choice of hiding under the shields, shooting the invaders, or shooting the mother ship – each with different risks and scores attached to it.

In computer game AI the most common techniques used for making decisions of this sort are: tree searching, and point allocation. The often cited example of this is the travelling salesman. It is a problem that aims to find the quickest route for a salesman between several cities – London, Birmingham, Oxford, and Bristol. From London you can go to Oxford, then Birmingham, then Bristol, or you can start by going to Birmingham first and so on. This can be represented in the form of a tree.

The computer can then climb up and down the tree working out the best route between the four cities. This is a simple example, with perfect symmetry, but when each journey from city to city has for example a different duration, or can only be done at certain times of the day, or if there are a hundred cities and 20 salesmen the problem becomes more difficult. One can reduce the amount of searching by pruning the tree – ie deleting trees that are impossible (in this example because there are no connecting motorways). The process can also be speeded up by adopting either a depth or breadth-first search strategy. Depending upon the shape of the tree, this will generate a good result more quickly by cutting down the amount of time actually spent searching. There are other tricks and metaphors for this kind of problem which can be applied for different problems, but tree searching is the best analogy.

Squaring Up

The second decision making process used in computer games is more simple. It is a points based system. It is best used where there are a number of discrete choices to be made. For example in **Othello**, where the player can only place a counter on a single square on the board. Each square can be allocated a value according to the number of enemy counters it will turn, and its *geographical* position on the board. Certain squares are inherently more attractive – the corner and edge squares, but not the ones immediately adjacent to the corners. This is the system I used to determine which planets were desirable to enemy invasion fleets in **Imperium**. It can be combined with a tree searching system, if, as in the **Othello**, example, the enemy player is likely to counter the move in a certain way, and the value of each possible move is likely to be modified by the benefit the enemy will get from the move in the NEXT turn.

The last major area of computer game AI is natural language processing. This is most common in adventure games, but occasionally appears elsewhere. An adventure game like **Zork**, or **The Hobbit** has a parser, which examines the user's typed input, and analyses it for meaning. It will distinguishe verbs and nouns, and the more advanced

parsers can cope with subclauses, and adverbs. These parsers tend to have a vocabulary limited to the objects in the game (nouns), and the actions it can do to them on behalf of the player (verbs). Occasionally the process is reversed, and a computer will use similar rules to convert information held electronically to natural language. A very simple example of this (because it is a very difficult thing to do) is in **'Nam** where the newspaper reports are made up in English from internal data. It is however, very difficult to avoid the appearance of *canned* text. This is one area in which there is much scope for development, for despite attractive graphics on computer games, I think people still respond well to the written word.

Coded Approach

Clearly, the object of computer game AI is to provide a challenging opponent to the human player. In order to do this AI must produce reasonable and relatively unpredictable behaviour. This usually falls short of providing actual intelligence, or anything even passing for it. Typically each piece of computer code that passes for AI in a computer game is in fact a specific algorithm designed to solve a particular problem, perhaps using some of the techniques mentioned above. There are some problems with this approach.

Karl Popper was a philosopher of science. He wanted to show that any given scientific explanation for things was not necessarily complete of itself. This was because it would only take one example of a contrary phenomenon to overthrow the explanation. This is best illustrated by analogy. Just because the sun has risen every morning in your life, does not mean that it will rise tomorrow. Popper argues that just because Newtonian physics explains the motion of planets or falling objects, that does not mean that it can explain all such phenomenon – as has been shown in our century by Einstein. What does this have to do with computer game AI? Quite a lot!

One of the best examples of the problems of ad hoc AI solutions in computer games was given by Chris Crawford in his article 'Design Techniques and ideals for computer games'. Although written in 1982 he describes a perennial problem. 'While designing **Tanktics**, I encountered a problem with certain lakes. If the computer approached a U-Shaped lake from the wrong direction it would drive its tanks to the end of the peninsula formed by the lake, see the water blocking its forward progress, back up, change direction slightly, and drive back in to the peninsula, only to be blocked again by the lake. The U-shaped lake created a trap for my artificial reckoning algorithm. I expended a great deal of time working on a smarter artificial reckoning routine that would not be trapped by such lakes and yet would retain desirable economies of motion. After much wasted effort I discovered a better solution: delete the U-shaped lakes from the map.'

In other words any hard-coded solution for a computer game problem will only be effective as its programmer wants it to be. The programmer must foresee all potential problems the solution code will have to deal with and attempt to provide for them all before the event. The programmer provides an algorithmic solution to a specific problem set, not a method of solving it by itself.

This distinction is important, in the light of Popper's falsification principle mentioned above. Any given solution hard coded into a computer game is not sufficient to provide for *every* possible problem. It may provide for every one that comes up in testing, and for every one that the programmer can conceive of, but not every possible one. It can provide only a simulation of intelligent behaviour.

Show Of Force

Besides such theoretical reasons for the failure of computer AI to live up to its promises, we can see this happening empirically. In **UMS** (the original one), sometimes in a battle a unit would charge up to the enemy front line, attack, be beaten off, and withdraw sideways, only to repeat the process with the next unit along.

In my game **'Nam**, there was a very complicated formula for working out which towns or regions the communist units were going to attack. It worked very well, the units were more or less uniformly distributed and attacked the right cities and US units with the appropriate amount of force. The only problem was that it was infinitely predictable. Any such solution fails the two test mentioned above. The solution? It was not to write an even cleverer AI system, but to occasionally pick the 'wrong' target for a unit at random, so that they would appear to make mistakes, or bluff or whatever.

From a programmer's point of view, this has further ramifications. It

I Think... ...Therefore Impressions

RORKE'S DRIFT

- This war-game faithfully re-creates the classic defence by a small unit of Welsh soldiers against an onslaught by 4000 Zulu warriors!
- This unique "minitiature-style" computer war-game lets you control each man individually, in a bid to hold off against the Zulus against all odds.
- Phenomenally successful, Rorke's Drift is your chance to make history!
- "Incredibly playful" (CU Amiga);
  "The graphics & presentation are very slick" (ACE)

IBM PC, ST & AMIGA £24.99

COHORT – FIGHTING FOR ROME

- COHORT is the long-awaited follow-up to Rorke's Drift. Using the same "minitiature-style" war-gaming system, COHORT gives you four Roman battle scenes, and many different types of soldiers, together with user-definable army composition...so you can create your own individual battles!
- The Rorke's system has been enhanced to provide better group command facilities, a strategic map, improved scrolling and sound effects.

DUE OUT LATE MARCH ON ST & AMIGA; IBM PC IN MAY

THE FINAL CONFLICT

- A frighteningly topical simulation of power politics and global warfare. The Final Conflict gives you command of an allied force just as a major world war has broken out.
- Command tanks, infantry and navies to defeat your opponent; use diplomacy; manage your home resources; send out spies; and be prepared to launch nuclear missiles if it should come to it.
- "like an advanced computer version of the classic board game RISK... worth checking out if you fancy your chances at world domination" (CU Amiga)
- "One of the best strategy games around" Gen D'Or 90% (Generation 4)

IBM PC, ST & AMIGA £24.99

MERCHANT COLONY

- A huge game of colonisation, industrial development, trading and warfare set in the Eighteenth Century
- Buy ships, hire soldiers and explorers, and send ships sailing around the world to set up new colonies. Explore the new territory, discover minerals or natural produce, and build factories to produce goods. Then ship these goods around the world, to obtain the best prices!
- Along the way you'll encounter pirates, battles with other colonial powers, native uprisings, and numerous natural hazards.
- This is the Eighteenth Century – can you build an empire?

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Colon Developments, Watery Lane, Darwen,
Lancs BB3 2ET.

i IMPRESSIONS

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means that for each game problem, there has to be a specific code solution. For example in **'Nam**, there is a specific AI routine for allocating targets to the communist units, deciding which communist units to build each year, and where to send them, distributing resources to the Ho Chi Minh trail, air defences and so on. Each one needs writing and testing to see if it produces reasonable behaviour and is fairly unpredictable. About a third of my programming time was spent on these routines. If there were a 'plug and go' AI solution, that could be tailored to each of these solutions easily and quickly it would improve the development speed of the game, and allow me as a designer to use computer intelligence more often. I shall come back to this idea of providing a universal AI system later.

Neural Networks

There are two objectives in the development of computer AI, the first is the development of knowledge representation systems, ie memory, and the second is the providing computers with some way of generalising or making rules from this information. These generalisations of rules should allow the computer to learn how to solve problems rather than apply a pre-designed rule or algorithm. The technologies of neural networks and genetic algorithms are two ways which allow a computer to generate solutions for itself. They are developing technologies, and are far from providing genuine artificial intelligence. However the use of even the most basic of these technologies in computer games could change the way in which they work considerably.

A neural network is a simulation of the process that go on in the human brain at the lowest levels. It is a network of simulated synapses. Just as the transistor is the smallest component of a computer system, the synapse is the smallest component of a brain. The analogy between synapses and transistors is close – they have discrete states that are affected by their connection with similar devices. The difference is that in computers transistors are built up into larger units to make memory, arithmetic and logic units, and so on, a network of synapses is like a clean slate. Such a network has certain inputs, and outputs, and they can be 'trained' to provide certain outputs according to certain inputs. They are very effective at pattern recognition, for example recognising human speech patterns, or printer characters. Importantly they are able to generalise, recognise particular words, rather than matching sound files arithmetically, or recognising 'z-ness' or 'a-ness' in written characters rather than algorithmically tracing the letter 'z' or 'a' in a particular style, size, and font. There are several kinds of neural network, some corresponding closely to what we know about the human brain, others resembling mathematical models of geography or energy maps, and the last kind are referred to as genetic algorithms.

It's In The Game

In many ways genetic algorithms are the easiest for the layman (particularly me!) to comprehend. They simulate natural selection on genetic material to 'evolve' solutions. If you think of a computerised box containing millions of potential solutions. The solutions are usually mapped onto strings of binary digits. The living solutions 'mate' by splicing and sharing their generic material – namely all or parts of this binary coded solution. Some of the solutions are constantly being 'killed off' by the computer according to how effective their genetic solution is. This can be done by comparing any two given solutions and, in the travelling salesman example, working out which one will generate the shortest journey.

Just as in the natural world, this natural selection will tend to produce better and better gene pool of solutions, and the the 'mating' will ensure that this gene pool is constantly evolving and generating 'new' solutions. The great merit of this system is that it starts out with completely random genetic material, and generates effective solutions. The only difficulty is that any solution has to be mapped onto a string of binary digits, and some way has to be developed of testing the solutions that are generated for viability.

In conclusion, while current computer games are very good a simulating intelligence and challenging the player, they are restricted and often predictable in their use of preprogrammed answers to specific problems. Not only that, but they are also very expensive in terms of programmer time to develop.

The future belongs to generalised learning systems, perhaps using nend still win most of the time; or a flight simulation where the enemys pilot actually improved his strategy by experience after each mission against you, or – my favourite – imagine an adventure game where the computer controlled non-player characters are indistinguishable from human players. SP

From the developers of UMS II

DESERT STORM SCENARIOS

For use with UMS II

Order of Battle Tables and unit locations compiled from data in *The Military Balance 1989 – 1990*, *For Your Eyes Only*, and GDW's *Desert Shield Fact Book*. Updates to the Desert Storm scenario will be announced through Intergalatic's newsletter which is sent free to all registered users.

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Tel: (319) 323 5293

Command Control

Stuart Mitchell rates the cyborgs

ARTIFICIAL intelligence (AI) in computer games generally focuses on the quality of play of the computer opponents. In some games, AI is used in the manipulation of *friendly* forces as well. I am going to start off here by discussing how AI is used for the human player's forces in games. A bit later I will discuss the more traditional role of AI as computer opponent.

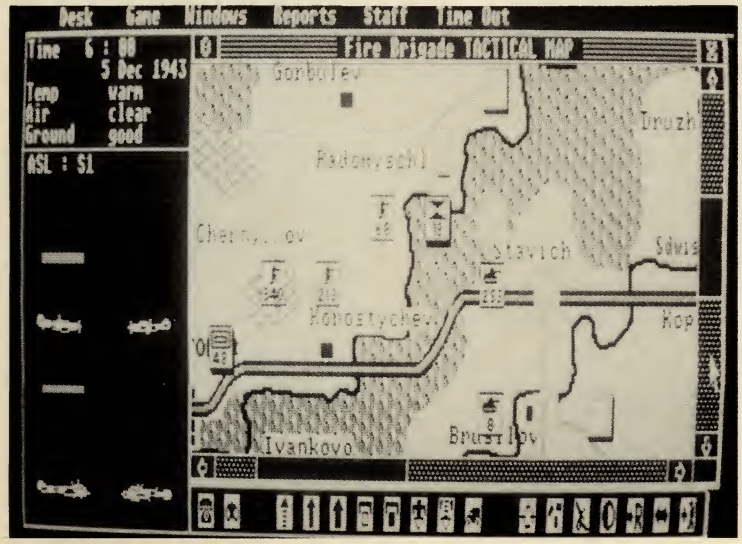
In SSG's Battlefront games (**Rommel, Halls of Montezuma** and **Panzer Battles** for example), the player issues orders to groups of his units. The computer then carries out these orders based on its own internal intelligence and the situation at hand. Given the 'fog of war' and various random factors, the results of a player's orders may not be exactly what the player anticipated. The internal AI of the Battlefront games has much more control over the *movement* of friendly units than over combat. When you direct units to attack (using one of several modes), all units in range will attack.

The AI does not make any decisions other than determining which units are in range (a simple exercise that can hardly be called AI). The main intervention of the AI is in the rotation of component battalions. The AI evaluates unit strength and fatigue and will rotate a weak or tired unit out of the front line if at all possible. It is the movement of units which is the primary task of the AI in the Battlefront games. As a player, you may only specify movement in one of two ways: movement towards an enemy unit, or movement towards a geographical objective (a victory point hex). The AI then moves all units of that command group towards the designated objective using the most efficient route it can find. In general, it will search out a straight line path and take it. It will use roads where available, and will cut corners at intersections. It is generally poor at avoiding enemy units, and will not attempt to take a longer route that might avoid contact with the enemy.

Command Failing

This last flaw is as much a flaw in the command structure of the game as it is a flaw in the AI. Ideally, players should be able to designate route-through points to better define a path to the objective. Failing this, it is extremely difficult to execute flanking manoeuvres. Clever players will often use stray enemy units or minor objective hexes to force movement in

Fire Brigade: an SSG assist



I Think... ...Therefore Impressions

BREACH 2

- nominated for strategy game of the year 1990 (STRATEGY PLUS)
- "A welcome breath of fresh air" (five stars out of five; PC Leisure)
- "a thoroughly absorbing close combat simulation" (ACE); "hugely enjoyable" (ST Format); "a superb product...it's just so addictive!" (Your Amiga)
- Omnitrend's Breach 2 is a detailed science fiction combat simulation, where you command a squad of marines through different missions. A true classic.

IBM PC, ST & AMIGA £24.99

UNIVERSE 3

- the follow-up to the hugely popular Universe 1 and Universe 2 from Omnitrend
- huge sci-fi RPG with animated movement and combat
- "quite a challenge to strategists" (Your Amiga)
- "a pleasant jaunt through the cosmos" (The Games Machine)

IBM PC, ST & AMIGA £24.99

BLITZKRIEG MAY 1940

- Ken Wright's most sophisticated WW2 game ever
- 2 different games – command either the Allied defence or the German Offensive
- "a hard, tough, thought provoking wargame with enough explosive play to make even the most hardened tabletop gamer sit up and take notice" (Games Gazette)
- historically accurate

ST & AMIGA £24.99

AFRICA KORPS

- The sequel to Ken Wright's immensely popular Blitzkreig May 1940
- Accurate simulation of the N African desert campaign in WW2
- Two complete games – play either side, with different objectives
- Highly sophisticated computer opponent

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FEUDAL LORDS

- A medieval game of treachery, greed, tactics and strategic combat!
- Play against the computer or up to 3 friends in a bid to rule the mythical land
- 3 types of troops; 3 types of battle (one interactive); seasons; sophisticated economy; alliances, mercenaries, assasins, plots, migration, investments, and lots more!
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- icon driven for ease of use; beautiful graphics & atmospheric sounds throughout

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a desired direction before re-routing them back towards their real objective. Unfortunately, this indirect approach is not always possible.

To be fair, the overall feel of command is well simulated by the system. Many of the frustrations that players have with manoeuvres accurately reflect problems experienced in combat. It is also worth remembering that this system was initially programmed for 8-bit computers with 64K of memory (the Apple II and Commodore 64). Considered in this light, the accomplishments of the AI in this game are astounding.

Terrain Restrictions

Nonetheless, there are some real (though minor) flaws. Impassable terrain tends to frustrate the AI, particularly if units are worked into a corner and their objective lies directly beyond the impassable terrain. The AI finds it difficult (usually impossible) to determine a path that involves backing away, moving laterally, then moving forward. Fortunately, this situation rarely arises.

The quality of computer opponents in SSG games is a point of pride with that company. In the Battlefront games, the AI tends to fight well on the defensive, but less well as the attacker. Set piece battles are handled well (the Malta scenario in **Rommel**, for instance). More fluid situations are not handled quite as adroitly (Cauldron from the same game is an example). The computer will rarely exploit an advantage aggressively and tends to 'play' conservatively. In my experience, this is a tendency of most AI routines in computer wargames.

Programmed Response

An exception to the conservative play of computer players may be found in **Fire Brigade** from Panther Games. The AI in this game was programmed with an assist from SSG, and it shows. Like the Battlefront games, you issue orders and then watch the computer carry them out. Unlike the Battlefront games, the AI in **Fire Brigade** is able to handle the fluid situation simulated in the game (Von Manstein's defense of the Dnieper around Kiev in late 1943). The computer opponent will take aggressive advantage of any openings and exploit them completely, plunging into your rear whenever possible.

Getting back to SSG, a game that game presents a different challenge for the AI programmer is **Reach For The Stars**. In this the computer opponents must run an economy as well as command military units. The AI for this game is quite good. The computer opponents run a fiercely efficient economy and aggressively seek out their opponents at the earliest opportunity.

However, there are two major flaws in the computer players' strategy. First, they tend to pick planets with mediocre industry ratings (with commensurate affects on the potential economic output). And second, they tend to build one massive, irresistible fleet. This leads to an odd strategy for the human players: divide your own forces and conquer. Or in other words, hit 'em where they ain't.

The preceding paragraph highlights one of the essential problems of AI programming for games. Given a static AI, the programmer must anticipate as many possible strategies as possible. Since it is virtually impossible to anticipate (and program) all possible strategies, any AI must necessarily be defeatable.

For many players, the biggest challenge of any new war or strategy game is to 'crack' the AI. That is, the game is treated as a kind of puzzle with the solution being the strategy that was not anticipated when the AI was programmed.

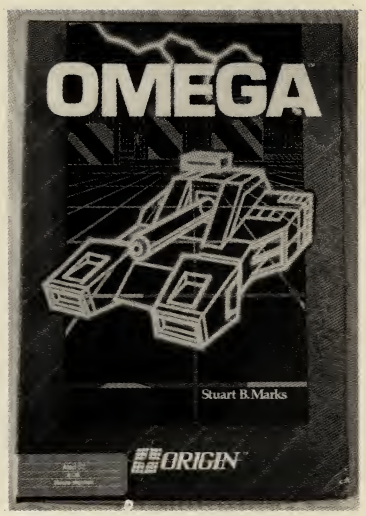
Programmers have responded to this threat in a couple of ways. In many cases, they resort to a simple expedient: they cheat. They may give the computer opponent extra firepower, or alter the parameters to give the computer side an advantage. While this is sufficient for many players, I personally find it abhorrent. I would rather a straight-up cakewalk than an artificially balanced contest.

Check Mate

Another approach is to allow variability or enhancement in the AI. I know of only two games that do this. The first is Origin System's **Omega**. In this, you are given funds to build a computer-controlled tank. Then *you* program the AI of your tank before testing it against other pre-programmed tanks. Any flaws in the AI are thus your own *and* can be corrected. If nothing else, **Omega** serves as an object lesson in coding AI to handle all situations. The fact is, it can't be done. All you can do is create a different tank.

In Interplay's **Checkmate**, a new Chess program, the computer opponent is programmed to add moves and situations to its library over time. Thus, the AI 'learns' and, presumably, improves. I have not seen **Checkmate** in action, so cannot comment on the effectiveness of its program. At any rate, I am not enough of a chess player to really push a program like this to its limits. It will be interesting to hear from accomplished chess players as they do battle with this new program. SP

Omega: isolation tank



Rommel – Battles for North Africa and Halls Of Montezuma were designed by Ian Trout and Roger Keating. Published by SSG, they are available for the PC

Omega is published by Origin Systems/ Mindscape. It is available for the PC

Checkmate was designed by Chris Whittington and is published by Interplay. It is available for the PC

Fire Brigade was designed by Dave O'Connor and Tony Oliver. Published by Panther Games, it is available on all formats

WE LIKE...

Feudal Lords (ST, Amiga)

UMS II (PC, ST)

Genghis Khan (PC, Amiga)

Bandit Kings of Ancient China (PC, Amiga)

Scrabble (beta test new deluxe version for the PC)

EZRA SIDRAN

Interviewed by Matthew Stibbe

With the release of the long awaited **UMS II,** there seems no better time to talk to the man who designed both it, and its predecessor, the original **Universal Military Simulator**, and whose grasp of game AI design is widely admired.

Matthew Stibbe: How would you describe yourself?

Ezra Sidran: In the context of this interview I'll interpret this to mean: how would I describe myself in relation to the **UMS II** project. I wrote the original **UMS** by myself during many long solitary hours. Because of the commercial success of the original I found myself as the *de facto* project manager of large team at the time of the signing of the **UMS II** contract. Consequently I was placed in the position of team leader. On some versions of **UMS II** I wrote as much as 35% of the source code; on the others quite a bit less. Probably 70% of the algorithms are mine, however. Without appearing maudlin I would like to say it was not only a great honor, but a supreme learning experience, to work with these wonderful people: Andy Kanakares, Mike Morton, Ed Isenberg, Ed Bever, Dan Horn, Dave Craft and Mike Pash. Of course, the other side of the coin is that I had to play corporate president (roughly equivalent to your managing director) and hustle up money, pay the bills, deal with accountants, bankers, publishers and the occasional police officer).

*MS: What did you do before you started work on **UMS**?*

ES: Like many programmers, I was a musician first. I played keyboards on the road and in recording studios for over ten years before returning to college to learn to program. I played piano in bars while I was in college as well. I still keep a Yamaha baby grand in the office to play during long programs' compile and link. (On a recent visit to MicroProse US I noticed a road-weary guitar amp in Sid Meier's office.)

MS: What prompted you to invent this game?

ES: I had long been interested in military board games and military history in general. For some years I had fantasized about a computer military simulator – long before the first consumer computer wargame – and had sketched out detailed descriptions of it. I even went so far as to write a series of science fiction short stories (apocryphally entitled 'Wargames') in which this hypothetical computer simulation played a key role. In 1980, when I was offered a scholarship to return to college and study computer graphics, I jumped at the chance and geared as much of my studies as possible towards what would be necessary to write **UMS**. I studied at a Catholic college that insisted on two courses of religion before graduation; I substituted 'philosophical cybernetics', or Artificial Intelligence, for the requirements. Before graduating I wrote two versions of the program, the first on a 16K TI 99/4A and the second on a 48K Apple IIe clone. While neither have ever been released, the Apple version led to my first contract with TelecomSoft for the Atari ST version of **UMS**.

*MS: What is **UMS II**? In one sentence!*

ES: **UMS II: Nations at War** is a global military simulator of epic proportions that consumed over fifteen man-years to bring to completion.

MS: What makes it different from other wargames/strategy games?

ES: **UMS II** is unique in the depth of the simulation. While other programs take the world, or à world as the playing area, **UMS II** utilises four levels of zoom that reveal increasingly detailed levels of terrain, elevation, weather, and military formations. Furthermore, every one of the thousands of variables that make up a **UMS II** scenario are accessable by the user to manipulate as desired. The user may even reweight the combat resolution equation. It has always been our intention to produce simulations; not games. Currently, we are following the situation in the Persian Gulf very closely. We have input values for leadership, morale, supply level, experience and efficiency and made cross-indices for unit strength in various offensive and defensive formations, fighting in thirteen different terrain types, opposing forty different unit types – as well as the attrition rates of units as influenced by supply, leadership, morale and efficiency – but the accuracy of the result is dependent on the accuracy of the information entered into the simulation. Does the Iraqi Third Division have a leadership value of three, or four, on a scale of ten? **UMS II** is truly a Lotus 1-2-3 of military simulators. It is only as accurate as the data entered.

The Universal Ezra Sidran

MS: What is the 'Planet Editor' program?

ES: Writing the Planet Editor was the first step towards creating **UMS II**, as we needed a program to make data files that would be 'read' by the **UMS II** program itself. A **UMS II** data file contains all the necessary information to reconstruct, inside the computer, a three-dimensional

planet, with active weather systems, wind patterns and climates, up to 127 nations and their armed forces. These data files are created within the Planet Editor program. A **UMS II** Planet Editor data file created on one machine may be read by all other machines. Currently, the only Planet Editors in existence are located at the offices of Intergalactic Development. However, we hope to make them available to the general public in very short time.

MS: Do you plan to release a Desert Storm scenario? Or any other scenarios?

ES: It was only natural that as **UMS II** reached completion that we would enter the current state of the world's armies into a data file. The project began beta tests in August of 1990 just as Iraq invaded Kuwait and we watched in horror as our simulations began to mimic reality. I was interviewed in October by an American computer magazine and recently my observations of the Persian Gulf crises were published. Our **UMS II** simulations – though no more reliable than the data entered – appear to be quite accurate. This **UMS II** data file is available directly from our offices.

MS: What makes a good programmer?

ES: I was once – just once – asked to give a talk to the incoming class of programmers at my old college. I started by saying that the greatest asset that a programmer could have is the ability to say: 'I fucked up', fifty times a day. If you are unable to admit your mistakes you will never be able to debug a program. You can't blame it on a computer that capriciously added errors to your source code. If there's a fault in your program, you put it there, and you have to find it and fix it. I am truly amazed at the number of people that are unable to acknowledge their mistakes. They are not programmers, of course, but have found refuge as politicians.

MS: Can good programming be taught?

ES: Yes. Keeping in mind that the programming candidate has been able to put false human pride behind him and is prepared to admit to the errors that he will inevitably make, anyone can be taught to program. Someday primates will program. Mark my words.

MS: Is programming an art or a science?

ES: Programming is like nineteenth century artillery: equal parts Art and Science.

MS: Can it be 'managed'?

ES: Many times during the course of the **UMS II** project I felt like I was back in a road band. Commercial software development has evolved, like rock'n'roll, to the point where any project worth doing is now a big project. Big projects consume programming talent and money. Big projects are big business now and they involve spread sheets, flow charts and financial statements. **UMS II** cost over $100 000 to bring to market.

Yes, programming can be managed and in these days it must be managed. Only well managed programs survive. 'The road of development is littered with the corpses of programs died aborning.' – Anon.

MS: Do you develop on one machine and then translate or what? What is you main development machine and why?

ES: **UMS II** was primarily developed on two machines: the Macintosh and the Atari ST. Mike Morton, who designed the paging, memory management and quad-tree routines, writes on the Mac. In addition, we used Mac SEs, MCI E-Mail, MCS (the Multi-Channel Communications System by Yves L'Emperur) for modem communications throughout the project.

However, I have a great love for the Atari ST. Andy Kanakares and I wrote all the AI routines on a Mega 4 with 20 meg hard drive. Incidentally, I would say, 'Andy, we need a routine that finds the closest road from Unit A' and Andy would write the code and that's how the **UMS II** AI got written.

MS: Do you think there is or will be a viable Mac games market?

ES: Absolutely. The Mac market is the fastest growing entertainment market and will, someday, be about 35% of the marketplace. The Macintosh is the logical heir to the 68000 marketplace. I say this with regret, but the writing is on the wall, and eventually the Amiga and the Atari ST must succumb to the forces that Apple can bring to bear in the US market.

MS: How difficult is it to develop a game for several different machines?

ES: I once said, 'I hope someday there's only two computers and I don't care which two.' That's not true. I do care. Developing for different machines is an insufferable pain in the ass.

MS: Are there any future strategies for reducing the amount of machine specific code that you are looking at?

ES: **UMS II** was written from top to bottom with the knowledge – and to the best of my abilities the foresight – that it would be released simultaneously on four formats: IBM, Macintosh, Amiga and Atari ST. All four versions were finished within ten days of each other. If they don't hit the stores within ten days of each other the blame is not here.

MS: When developing a program, how much time do you take to i) prototype, ii) plan, iii) crash together a (just) working demo, iv) review code, v) improve/modify existing working code, vi) work constantly to make the thing work properly (according to a specification) and vii) beta test? Answer any or all of these, or describe your own method of developing.

ES: By 'entertainment software' standards, **UMS II** was an undertaking of colossal proportions. Throughout its three year development I often felt like I was in the midst of a miniature Trinity Project.

To make matters more difficult our development team was stretched literally across half the world. Mike Morton, who designed the quad-tree compression routines for our map data and the paging routines for memory management lives in Waipahu, Hawaii. Dr Edward Bever, who wrote the program specifications and much of the historical commentary, teaches at Drew University in New Jersey, five time zones to the east. While Dan Horn, who designed much of the interface (especially apparent in the Planet Editor) lived in Florida. Obviously, MicroProse UK is on the other side of the Atlantic while Ed Isenberg (Amiga implementation), Mike Pash (MS-DOS implementation), Andy Kanakares (Atari ST implementation) and myself are in Iowa in the middle of the midwest.

The first thing we did was invest in a number of Mac SEs and modems. The next thing we did was started publication of The Loop (press run:

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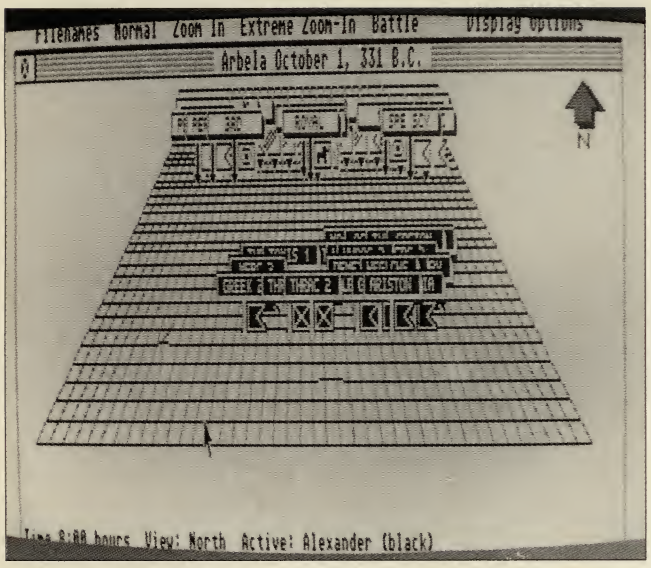
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Original UMS: still selling

five) where I disseminated everyone's ideas. Because I insisted that we would release on all four formats (IBM, Macintosh, Amiga and Atari ST) simultaneously it was imperative that Mike Morton write a series of paging, quad-tree, compression and memory routines that would be implemented identically on all target machines. Perhaps as much as the first six months of development time was spent on this alone.

The first benchmark that we passed was when encoded quad-tree data, written on the Macintosh, was read on the other three target machines. Of course, by this time Microprose was, as we say, sweating bullets. They had invested perhaps $35 000 and wanted to know if they should start firing Development Managers. It was at this time that we had to start to cobble together something visual to keep our publishers happy.

Publishers, as a rule, do not care for long streams of data outputted to a screen. They want to see something a bit more graphic. Somewhere in early 1990 (about a year ago) we rushed forward the interface and could demonstrate to MicroProse that we were able to display lots of military units across an entire planet. I was flown out to Baltimore in Davenport's (Iowa), best approximation of a London double-breasted suit to show Major Bill Stealey that we hadn't entirely frittered away his advance.

Things went well – except for a particularly nasty bit involving a UK managing director, a boiled lobster and some past-due royalties – and I returned home in a snowstorm after spending thirty-six hours in O'Hare airport trying to find a flight west. We were left pretty much on our own hook for the next four months – subsisting on royalties generated by the original **UMS** (God bless it; still selling after four years!) – when we were assigned a number of AI benchmarks by MicroProse. These included the fairly difficult tasks of a cross-channel amphibious invasion (you try writing this some week!) and international paratroop assaults.

Again, I got a haircut and headed towards Moline International Airport for a business trip with some unforeseen misadventures. The UK review went well and we were advanced another £15 000 over the next three months with the understanding the End was in Sight. I didn't dare to laugh until the pilot said we were west of Iceland.

Throughout this period many changes were made to keep all the machines in sync. Every time a change, regardless of how slight, was made to the data file, Andy had to re-write the swapping code for the IBM. You see, the IBM stores data differently than the Mac, ST and Amiga (all 68000 machines). Two days before All Hallow's Eve 1990, MicroProse flew Steve and James from Tetbury to Davenport, Iowa, to see us to completion; 'speed the plow' as we say here in the Midwest. **UMS II** then entered the time of 'beta-test'; a period that lasted four months until it shipped.

MS: How difficult is game AI?

ES: Artificial Intelligence is the sublime achievement of computer programming. Good AI is a difficult task that, unfortunately, many programmers are forced to ignore due to the pressures of completion deadlines. Currently, computer wargaming AI routines fall into two categories: 1) set-piece routines; and 2) free-form, or heuristic, routines.

A programmer who is working on a simulation of one specific battle, or set-piece event, has a tremendous advantage. If one were to design a set of AI routines for the battle of Gettysburg, for example, you would weight the terrain features of Little Round Top, Big Round Top, Cemetery Hill and Cemetery Ridge very heavily. It would then be a simple matter to make certain that a computer general made sure to move one or more units to these locations.

However, a programmer that is faced with the problem of designing a set of AI routines for battlefields yet unseen, must employ heuristics or sets of amorphous rules. A heuristic computer general at Gettysburg must 'understand' that Little Round Top, Big Round Top, and the Cemetery Ridge chain are hills, and that hills are good on defense and are to be avoided on offense. The original **UMS**, Mark Baldwin's **Empire**, and **UMS II**, no doubt among others, employ heuristics. The AI for **UMS II** took about a year to write. I'm very proud of our effort.

*MS: What are the main AI techniques you used in **UMS II**?*

ES: We made a number of false starts on the AI routines for **UMS II** until late one night I stumbled upon an idea that I think worked quite well. As you know, **UMS II** has four levels of zoom-in on the map and this corresponds to four levels of an Order of Battle table (Army Group, Army, Corps, Division for example). It occurred to me that everything about **UMS II** was set up on these four levels and that the AI might be favorably integrated into this system. For example, in the Age of Napoleon scenario, the AI routines for the nation of France might operate something like this; on the 'Army Group' Level: after accessing the military strength of all adjoining nations, France decides to attack Austria. On the 'Army' Level: strike towards Munich. On the 'Corps' Level: what is the location of my corps? What towns are on the way from where I am to Munich? On the 'Division' Level: how do I get from Paris (where I am) to Metz (my first objective on the way to Paris)? Depending on where the 'AI sliders' are set in **UMS II** the user could just as well as set the French army's objective as being the Austrian army. In addition, the AI for each nation in **UMS II** must also make numerous production, taxation, building and recruitment decisions.

MS: How can game designers improve the performance of their game's AI?

ES: Some years from now, in a rational world, programs will be judged like Revere's silverware or Hobarth's engravings. Connoisseurs fifty years from now will judge a program on its AI. Programming teams that cannot produce good AI will cease to be.

MS: What is the future of the games market: Nintendo or PCs? Or what?

ES: There will always be a market for bread and circuses; and Nintendo, or whatever is the passing fancy, will be a part of that. There will always be a

platform game shoot-em-up machine and that is fine. There will also always be a medium for programmers that wish to do something profound.

MS: Will people be playing RPGs, simulators, arcade or strategy games, or what combination of these?

ES: Perhaps, more than anything, the answer to this question depends on the state of the world some years from now. In essence your question is: will the consumer someday need escapism at any price? I cannot answer. But I am always optimistic and hope that those wishing to write programs of some depth and breadth will continue to find the means to create and flourish.

MS: What will you be doing next?

ES: You mean, of course, after the 'Great Rest'; the 'Respite', the vacation, the holiday, the time off, the R&R, the Big Sleep? Our next computing project will be the **UMS II** of murder mystery games. I envision a system that loads data files at runtime and allows the user to construct logical solutions to famous, or infamous, mysteries. If everybody writes to my publisher and convinces him what a great idea this is I might be able to spend six months in London researching Jack the Ripper. Just in case you don't have the address, you should write to: Steve Perry, Development Manager, MicroProse, Unit 1, Hampton Road Industrial Estate, Tetbury, Gloustershire, England GL8 8LD. Tell him that you think Ezra should get lots of money to research this project. Remind him that if he doesn't readily concur you know where you can get his home phone number.

MS: Do all good games have to be 'wargames' at heart?

ES: No, but you must have a protagonist and an antagonist and it's better if one is the computer.

MS: What would you do if you didn't work with computers? What would you like to do!?

ES: I would kill to go to Oxford; indeed, I would kill you and masquerade as Matthew Stibbe in your classes. How do you feel about the life of Oswald Spengler? Well, if I was Matthew Stibbe I would spend a fair amount of time taking his theories of cyclical patterns of history and running with it. Oh, I think I could generate about 800 pages with Spengler as a starting point and talk about the repeating organic leitmotifs of empires and nations and how the scum eventually rises to the top. Of course, there are some, shall we say, non-commercial ideas that I have for programs, including an Optical Character Reader and translation program for Egyptian hieroglyphics that might, just possibly, sell five copies (including two to the British Museum). I would like very much to be able to write such a program but I can't very well invest the lives of my team on such a project.

MS: What programs did your team run during compile times?

ES: I've noticed that these things run in streaks: one week something like **Arkanoids** or **Tetris** will be the big hit of the office and the next it will be something much more involved like **Empire** or **A-10 Tank Killer**.

MS: Is there anything that you would like to add?

ES: Yes. Sometimes I walk around the office late at night and I see all the computers, the keyboards and the mixing console, the tapes, the CDs and the books and I think, 'I must be the luckiest kid on earth.' SP

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Consumer Electronics Show

Las Vegas 10-13 January, 1991

Report by Brian Walker

TO THE true Vegas reprobate there is only one game in town: poker. But to the rest of the 80 000 that attended the Consumer Electronic Show in January the name of the game was variety. Games came in all shapes and sizes, and dealt with subjects as diverse as the birth of Solidarity and role-playing in medieval Germany. There's no business like the games business indeed. We proudly present for your enjoyment, a complete round-up in alphabetical order (by company name) of all the goodies that lie in wait for you this year.

Access, your incredibly flexible friend, was showing off the new course disks for its remarkable golf game **Links** (reviewed issue #4). At the time of writing this is undergoing a port to the ST and Amiga (both 1 meg only) whereupon it will be released in the UK. The latest version is the 1.42 which Access says has corrected all the minor bugs that plagued the earlier rendition. Future add-ons include tournament and modem versions, CD-ROM with aerial fly-bys, a stats database, and a course architect.

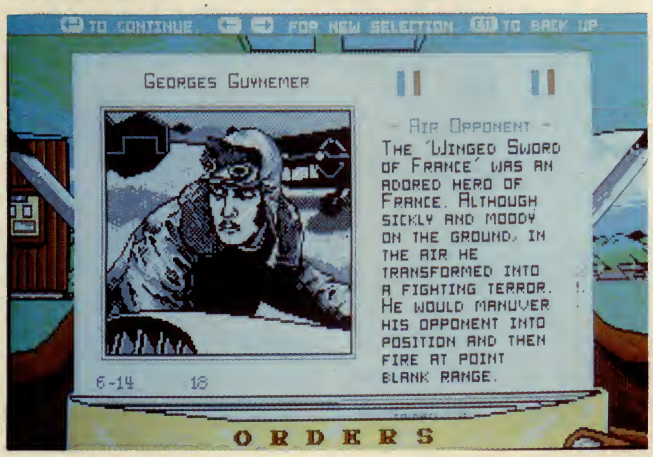
Accolade's big game was **Conspiracy: The Deadlock Files** which claimed to be the 'first fully digitized adventure game with 256 colour VGA'. It's actually more of a deduction game than anything resembling adventure. The storyline recalls that of a Hitchcock thriller in which the player is unwittingly thrust into a conspiratorial plot to overthrow the US government. The player assumes the role of an ordinary citizen who finds himself implicated in the murder of a CIA agent. To prove his innocence and expose the plot, the player must recapture the seven Deadlock Files. In feel, if not in plot, the game reminded me of Microprose's **Covert Action**. Expect an April release. Those of you who cannot afford a decent car may like to know that Accolade has added two to the **Test Drive III** game. The Acura NSX and the Dodge Stealth R/T Turbo arrive on an expansion disk called **Road & Car #1** which also includes five new roads located in New England, new traffic, and 'graphic surprises'. Available in April.

ACTIVISION looked to have one of the most interesting flight sims at the show: **Death or Glory** enables the player to relive the '12 greatest missions in air combat history. The games encompasses 12 missions taken from the two world wars, Korea, Vietnam, and The Falklands. Planes featured include the Sopwith Camel, Spitfire, MiG-21, and the F-16. Included also is a 'what if' option which enables the player to pit planes from a different era against one another. As you would imagine this is a somewhat whimsical option – in a Mirage you'd only have to fly-by a Sopwith to rip its wings off.

The Ancient Art of Brøderbund has been the company's historical simulators programmed by the brothers Murry. Their latest offering is **The Ancient Art of War in the Skies**, a remarkable looking First World War game which is part strategic and part flight sim. The game comes with several predesigned campaigns and scenario editor. The strategic game involves monitoring the ground units and planning your missions accordingly. Unlike the earlier games, **War in the Skies** will feature full colour VGA and sonic support. Available in June. Arriving around the same time will be **Sports Simulated Tennis**, a fascinating combination of action and strategy. Players can create tennis pros, name them, and then give them individual abilities. Each pro can play a full season of tournaments, including the Grand Slam. The graphics are excellent, and options include a replay facility.

The most original game I saw at the show had to be **Solidarity** from California Dreams. The objective here is to form a viable Polish trade union in pre Lech Walesa days. Armed with meagre funds, a handful of volunteers and a few sausages, the player must attempt to rally the workers while contending with the secret police, general unrest, and the possibility of Soviet intervention. All this occurs not, as you might expect, in grainy black and white, but in full colour VGA and with sound support. Even more remarkably, the game was actually programmed by former members of Solidarity in Warsaw! Watch out for this one.

TAKING up where **TV Sports Football** left off is Cinemaware's **TV Sports Baseball.** Like its predecessor this features a combination of action and strategy in a league setting, though there is a purely management mode. Available in June. From the most sublime of sports to the ridiculous: **Rollerbabes** which is based on the super tacky 'sport' of roller derbies. Teams (male and female) compete on a circular track and score points by a combination of speedily covering distance, avoiding traps set by opponents and, of course, by taking out the opposition. Like its football predecessor, **Rollerbabes** includes league play and statistics. The game can also accommodate up to eight human players with computer controlled teams making up any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GEORGES GUYNEMER
AIR OPPONENT
THE 'WINGED SWORD OF FRANCE' WAS AN ADORED HERO OF FRANCE. ALTHOUGH SICKLY AND MOODY ON THE GROUND, IN THE AIR HE TRANSFORMED INTO A FIGHTING TERROR. HE WOULD MANUVER HIS OPPONENT INTO POSITION AND THEN FIRE AT POINT BLANK RANGE.
5-14
18
ORDERS

Winged sword of France: Brøderbund's Ancient Art of War in the Skies

shortfall. This looked to be a winner all the way. Due any day now. Also from Cinemaware comes **Enemy Within**, an adventure/strategy game. Unlike most adventure games, the player in this takes the role of the *partner* of an on-screen computer controlled character. The main character is one Garrick Simms who is a sort of rogue spy pursuing his own agenda, sort of like Ollie North. The player's job is to clamp down on his more eccentric schemes and channel his paranoid energy in the right direction. The adventure consists of five 'episodes' and takes place in four different locations throughout the world. Cinemaware describe **Enemy Within** as the 'first interactive buddy movie'. And why not? Expect a June release.

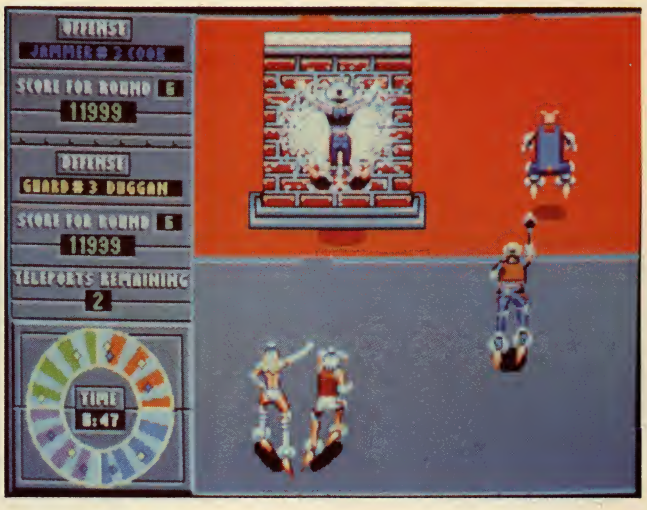
Sports fans will be pleased to hear of the imminent release of **Earl Weaver Baseball II** from Electronic Arts. The 1.5 version of this game was always our favourite simulation of the diamond, though unfortunately it was never released in the UK. This new rendition also looks to be confined to the US as it focuses on some of the on-line baseball stats services available there. The program enables you to download these with a view to creating 'fantasy leagues'. The PC version of **Star Fleet II** has also been upgraded. The new 1.5 edition will include a tutorial program and a better manual. EA also confirmed that **PGA Golf** will be available on the Amiga this summer, though no sign of any course disks.

IF ANY one game dominated the show then it had to be **Castles** from Interplay.This remarkable product combined role playing and resource management, with the creative elements of **Sim City.** Based on the thirteenth century castle building that Edward I undertook in Wales, **Castles** allows the player to design, defend, and manage their own dream castle. Taking the part of local lords, players are faced with a variety of strategic challenges; where to put the site? How high should the battlements be? How hard should you work the peasants and how much should they be taxed? Or, as the blurb eloquently puts it: 'Make scores of enemies, then sit in a cold damp castle and wonder why no one likes you'. **Castles** comes with 256 colour VGA, a complete musical score, three levels of difficulty, individual or eight castle campaigns, and realistic or magical settings. **Castles** looks set to be one of the games of the year when it is released in April. To celebrate the launch, Interplay held a party at the Excalibur Hotel in Vegas. The main attraction was a jousting tournament featuring knights on horseback. Whatever the eventual merits of the game, it's a safe bet to say it's got to be better than the show. Another intriguing release from Interplay was **Lexi-Cross**, a combination of a word puzzle and TV game show, but without the banality that usually implies. Set in the 21st century, **Lexi-Cross** has become the most addictive, thought provoking word game on the planet, and creating legions of couch potatoes in the process. Players are faced with a board of over 150 tiles. During a turn a cyborg hostess turns them over one at a time, exposing hidden letters and prizes. Players must then attempt to decipher the hidden words and solve the puzzle by finding the common theme that ties all the words together. Instead of exposing letters, players may choose to spin a money wheel, or get hidden vowels. **Lexi-Cross** features solo, face-to face, or team competition, 600 puzzles, a modem option, and a high rate of addiction.

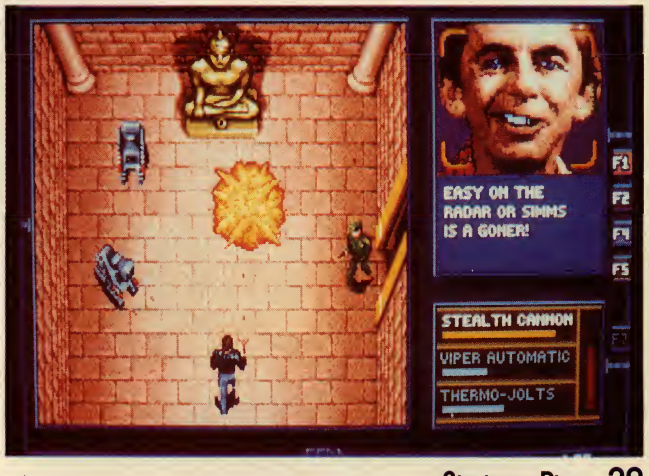
FOR SOME years our favourite strategy games not even been available in the UK. I refer to the historical simulations put out by the Koei Corporation. Now all that has changed thanks to a distribution agreement Koei signed recently with French company Infogrames. Already **Genghis Khan** (reviewed issue #4) and **Bandit Kings of Ancient China** (reviewed issue #3) have been released in the UK. Both are highly recommended. Next up is likely to be **Nobunaga's Ambition II**. This is a considerably enhanced version of the original which now prevents players being eliminated (they come back as 'heroes'). For those unfamiliar with the background, the game is set in 16th century Japan when Oda Nobunaga attempted to become Shogun and thus unite the country. Like most Koei games, it is a economic, military, and diplomatic simulation. Total sales of **Nobunaga's Ambition** approach 700 000. A full review of **Nobunaga II** will appear in our next issue.

Another Koei game which has spawned a sequel is **Romance of the Three Kingdoms**. This is based on a Chinese novel of the same name written by Lo Kuachung in the 14th century. It traces the period of the centralised government of the Later Han Dynasty in AD 168 to China's division into three separate kingdoms. The original game offered five chronologically arranged scenarios. No details about the sequel as yet, though a summer release is anticipated. Also due this summer from Koei is **Liberty or Death** which is based on the American revolution of '76. At first sight this might seem a remarkable diversification for Koei, but it is in fact the first step down what promises to be a long and winding road. 'We think we've gone as far as we could go with Oriental simulations,' said Marylynn Slattery from Koei. After **Liberty**, expect to see their Napoleonic game **L'Empereur**, followed by **Teitoku No Ketsudan** – a Second World War game set in the Pacific. The design of all the Koei games is credited to 'Professor Kou Shibusawa' who, as was revealed to me by Ms Slattery, does not in fact exist. It is a pseudonym used by the in-house design team at Koei. 'We'd been getting so many requests for interviews with the "professor" that we decided to come clean' said Ms Slattery.

Lucasfilms' 'what if' game, **Secret Weapons of the Luftwaffe** is still unfinished and is now not expected until April. From the Luftwaffe to **Liftoff**, or rather the designer of this excellent boardgame,



Get yer skates on! Rollerbabes are coming!



Radar rangefinding in Cinemaware's Enemy Within

Fritz Bronner who stopped by our stand at the show. Readers may recall a letter from Mr Bronner which appeared in issue #4, in which he stated that a software conversion of the game was a strong possibility. This is now confirmed and the game should be released towards the end of this year. An interesting footnote is that Fritz is an actor who developed an fondness for games while 'resting'. Watch out for him in *Miami Vice*. He also appeared in the more appropriate *Flight of the Navigator* which was shown on TV over the Christmas period.

Sports fans may care to note that the games of Micro League Sports look set to become available in the UK. The company's best known game is **Micro League Baseball – The Managers Challenge**. The support Micro League offers for its products is quite remarkable. They produce a quarterly newsletter giving details of upgrades, new disks, and replay results. There is also a free classified section for players looking to join/form leagues, or play face-to-face. Expansion disks include General Manager, Franchise History, and All-Star disks. Version 3 is due any day now. Joining the baseball game comes **Micro League Football** and **Micro League Basketball**. These are both coaching games, rather than action games and will be fully supported by annual stats disks based on real players. Although all the company's products are for aficionados, they are quite easy to get into.

AFTER A flurry of new releases it was surprising that Microprose had anything to offer, however, there are several new offerings in the pipeline, one of which is **Darklands** – a role-playing game set in medieval Germany, circa 1400 to be exact. It's the era of robber knights and private wars in a land where superstition rules. Microprose claim that **Darklands** will redefine the genre of role-playing. Features include: a new interaction system using menus, real time combat, unrestrictive character classes and, best of all, 'no joystick wiggling'.

Planned for the Fall is **Civilization** from designer Sid Meier. At first sight it looks pretty similar to the Avalon Hill boardgame of the same name, but Microprose claim it is no relation. 'Gamers have shown an avid interest in constructive and creative simulations like **Railroad Tycoon**,' claims Sid. '**Civilization** reflects this category of game and takes it one step further. Easy to get into and events will not be random, but will have a definite cause-and-effect relationship' he maintains. The simulation begins in 4000 BC. The player must develop an entire civilization from a small nomadic tribe. As the tribe grows, smaller groups can be sent to seek new people and territories. Success is dependent on the player being able to balance issues such as economics, politics, and defense. Historical figures such as Napoleon and Genghis Khan also make appearances. To enhance playability, **Civilization** will include a Civilopedia to explain definitions and illustrations of the terms and concepts used throughout the game.

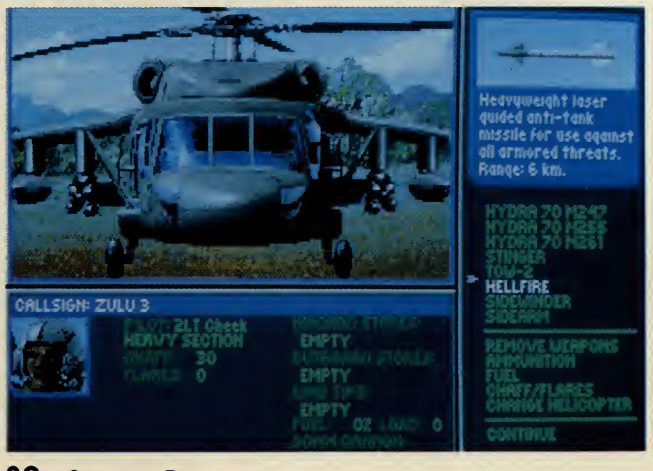
Microprose, of course, is known as 'the home of sims'. Looking set to consolidate this reputation is **F-117A Nighthawk** which takes up where '**F-19**' left off. Features include spectacular night graphics, an improved mission generator, and a more challenging AI. One of Microprose's most successful games was **Gunship**. No surprise then that **Gunship 2000** is ready for take-off. The sequel allows the player to choose from three types of helicopter and take up to five of any of the hundreds of missions. The action is located in the Persian Gulf and central Europe. The player can choose the types of mission which they want to pursue.

Gunship 2000 will also feature new development called Topological 3-D Graphics. This will enable terrain generation with depressions and elevations making exceptional realism during low altitude flying. Exceptional realism was the forte of former pilot and Microprose big cheese, 'Wild' Bill Stealey, as he blew away all comers in a **Knights of the Sky** tournament running on the stand. Missing presumed lost was *Computer Gaming World* Editor Russell Sipe.

Two of Microprose's affiliate labels also have new products which should interest readers: Legend, which produced **Spellcasting 101**, has come up with **Timescape** – a time travel adventure in which the player must repair the course of history which has been altered by Zeke S Vettenmyer. Paragon Software is set to release **Megatraveller II – Quest For The Ancients**, though at the time of writing the UK has yet to see **Megatraveller I**. For what it's worth, the sequel contains 'design improvements, interface enhancements, and additional features not found in the first game'. **Megatraveller** was originally devised by boardgame company GDW, as was **Twilight 2000** which has also undergone a software conversion. The game is set in Poland following the devastation wrought by World War III. Players must not only survive, but complete missions to help rebuild the sort of society that created the war in the first place. Because there is no command structure, gamers will decide their own actions, and ultimately, their fate (let's hear it for anarchy!). The character generation system will use icons which will produce and save an infinite number of complete characters. These may also be printed out and used in the pen and paper game.

NEW WORLD COMPUTING is best known for its '**Might and Magic**' series. And sure enough the company has come up with **Might and Magic III - Isles of Terror**. Unlike its forerunners, this new release will feature 256 colour VGA and sonic support. Play features include elaborate world simulation, 10 unique character classes, cinematically animated sequences, and an intuitive interface. **Planet's Edge - The Point of No Return** is an entirely new RPG from New World. This postulates the view that Earth has disappeared! All that's left is a group of technofreaks fooling around on Moonstation Alpha. When a damaged spacecraft of alien design is discovered in the vicinity of Earth's last known location, they start to get serious. The player's task is to find the parts and raw materials necessary to reconstruct the alien device in the hope of bringing Earth back into the physical universe. Simple.

Origin – 'We create Worlds' – has recreated Mars for the latest release in the Ultima series. The storyline of **Martian Dreams** bears a distinct resemblance to that of **Space 1889**. The yarn begins at the Columbian Exposition in Chicago circa 1893, where the player has the opportunity to meet historical figures like Siggy Freud and Tommy Edison.



Hellfire and damnation from the skies: Gunship 2000

Calamity Jane, the Wild West hooker, is also there plying her trade. Even Mad Monk Rasputin drops by to say hello. Before you can say 'gor blimey guv, you need a shave', the ubiquitous hero Avatar is on the scene trying to get a few mugs to join him on a trip to Mars. Here he hopes to unravel the dark secret of Rasputin and his Martian allies (!). Mad Monk Rasputin was a Martian!!! *Sunday Sport* eat your heart out.

The release date for the PC version of this surreal adventure is May.

Sierra On-Line confirmed that there will be a **Leisure Suit Larry 5** (Al Lowe swore he would never do a '4'). Sierra's big push is into the minefield/treasure trove that is multimedia. The company's first product for CD ROM, **Mixed Up Mother Goose**, was launched at the show. Sierra clearly sees this platform as an entry ticket into the home of Mr and Mrs Everyperson. The question is: can Sierra retain its loyal fans while simplifying the games for mass appeal?

Whatever format prevails Sierra is certainly giving it its all. Any time now the company will be launching its bundled CD ROM drive. This will comprise a 'fastish' drive, a Soundblaster card, a mixer plus cables, a **Mother Goose** CD, a **Jones in the Fast Lane** CD, and a **Stellar 7** CD, all for under $800 (for UK availability see news pages). Sierra will also be supporting Commodore's CD TV with products later this year.

On the archaic format of magnetic disks, expect to see **Space Quest IV** very soon together with the action adventure game **Heart of China**. Like **Red Baron** this will be available separately in EGA and VGA. **Red Baron**, although only just released has a sequel waiting in the wings (sorry): **Great Warplanes** (lousy title) is a simulation showcasing the great warbirds and old crates of aviation history.

Autumn should see the release of **Conquests of the Long Bow** – the follow-up to last year's **Conquests of Camelot**. Sierra has also struck up a deal with Game Arts of Japan which will see the company distribute Game Arts products in Europe. Mostly they are arcade games which, as readers know, we are awfully snotty about. However, look out for **Zeliard**, the Rising Sun's answer to the role-playing adventure. Sierra also announced increased support for the Amiga. In 1991 Sierra will move to a 32 colour palette for game screens and make other revisions specifically for the Commodore machine.

GILMAN LOUIE, the ebullient head of Spectrum Holobyte is busy promoting **Falcon Version 3.0** which he claims will 'surpass all other fighter pilot simulations'. **Falcon** contains realistic 3-Terrain, based on the 'actual topographic world maps of three regions of possible conflict': Panama, Israel, and Kuwait (possible?).

The big feature of the game, though, is the campaign element. Within this, the player controls a squadron of sixteen planes, eight of which can fly missions simultaneously. Each mission the computer assigns is contingent on the regional conflict the player is currently engaged in. In each campaign, the computer will generate a set of missions according to the player's success on the battlefield, ergo; no two campaigns will be ever be exactly alike.

Falcon is the first product in Gilman's fascinating Electronic Battlefield series. The second, **Avenger A-10**, will be released late summer. The two games can be played together via a modem or null modem link, allowing players to fly joint missions consisting of an A-10, with an F-16 flying cover. Way to go, Gilman!

DAN CERMAK of SSI stopped by our stand to confirm that Gary Grigsby is indeed working on a 'War in the Pacific' game, using the system he developed for the very wonderful **Second Front**. Towards the end of the year the company will also be releasing an Arab/Israeli wargame. In their fantasy range (which pay the bills for the former), SSI is to release **Death Knights of Krynn**, the sequel to the **Champions of Krynn**. The follow-up kicks off a year after the conclusion of the original. Characters, of course, may be transferred over or an entire new party created.

Older readers may recall an SSI game called **Rails West**, a classic of its time and one that anticipated **Railroad Tycoon**. It was programmed by one Martin C Campion who promptly disappeared. Well, he's back. His new game is **Medieval Lords – Soldier Kings of Europe**, a strategic level multi-player simulation of politics and war in Europe, North Africa, and the Middle East. Six historical scenarios are included.

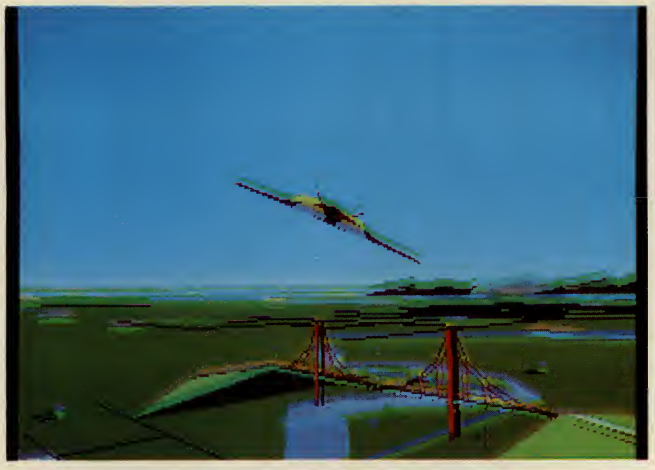
Options within these include diplomacy, subversion, and 'whatever it takes'. Unfortunately SSI are still plodding along with EGA and keyboard interfaces. Get real, guys! It must be said, though, that given SSI's track record it should still be a cracker.

Locking on to enemy targets: Spectrum Holobyte's Falcon

When people talk of the 'major players' of the leisure software industry, they generally mean the Microproses, Sierras, and Electronic Artses. Add to that roster the name of Virgin Mastertronic, one of the most exciting software houses around at the moment. **Supremacy**, **Wonderland**, and **Spirit of Excalibur** were all outstanding releases. Virgin's massive simulator, **Space Shuttle**, should add to the company's growing reputation when it is released later this year. In the interim look out for **Thirteenth Floor** a *really* unique adventure game, and the revamped and completely wonderful version of **Scrabble**.

Game of the show? Interplay's Castles

To summarise, it was a terrific show and great to see all the software houses striving for excellence, in complete contrast to the junk that littered the Nintendo hall. For me the game of the show was **Castles** – a real genre buster that should enjoy massive success. The only game in town? Not quite, but it could be the only game in your computer next winter. SP



Now you see it, now you don't: another mission for the F-117A Nighthawk Stealth Fighter (top), and a tank barny for Gunship 2000 (bottom)

F-117A Nighthawk Stealth Fighter

Gunship 2000

MicroProse

There's nothing like a sequel to stretch the profit margins. Now **F-19 Stealth Fighter** and **Gunship** live on in **F-117A Nighthawk Stealth Fighter 2.0** (how will they fit it on the box?) and **Gunship 2000**, respectively.

In **F-117A** you will have all of the features of the original plus more mission areas, a greater variety of weapons and improved graphics. Specifically, Microprose pin-point several areas. The interface will be improved to ease the selection of options, the integration of sprites will mean more spectacular smoke and explosions (no more exploding polygons and dotted lines. Hurrah!). The cockpit views will be re-designed, VGA owners will see graduated horizons (as seen in **F-15 II**). There are nine 'worlds': the three new ones include Colombia/Panama, Northern Japan and Iraq. The other areas have all been improved. In addition to that lot the sound has been upgraded with the introduction of digitised speech and the original, superb, manual has been rewritten with the inclusion of new articles on stealth warfare, and so on.

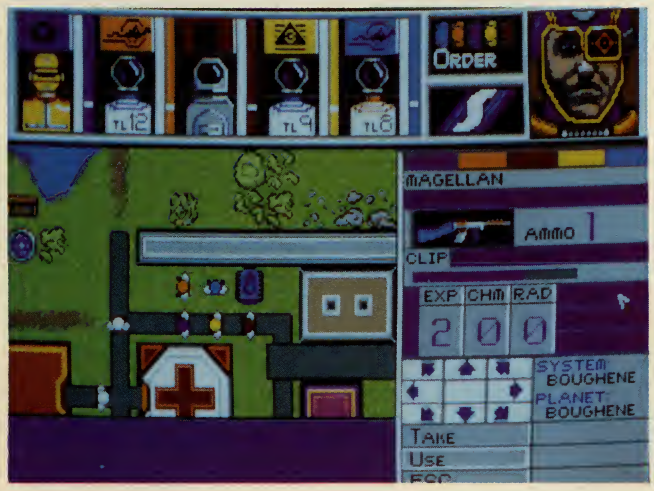
Gunship 2000 is a considerable enhancement of the original. Now there is a choice of one of seven helicopter types, a RPV (Remote Piloted Vehicle) a drone that you can program to provide live 'video' of targets; the low-level topography has a greater sense of detail; multiple views; a campaign option; mission builder; artillery and fixed-wing support; six arenas of conflict plus an excellent role-playing bolt-on feature where crew members increase their skill so that you must use each man to the best of their abilities. You also have the option to command a flight of five helicopters. Shades of **M1 Tank Platoon**.

Do not consider each sequel to be a 'play' on the sensibilities of the paying customer. Unlike movies these sequels build upon what has gone before. Why reinvent the wheel when you can improve upon already excellent games?

Megatraveller

Empire Simulations

Resistance is useless: Megatraveller – The Zhodani Conspiracy



Megatraveller 1 – The Zhodani Conspiracy, has finally been granted a UK release following some confusion as to who was to distribute the game. Released on the Empire Simulations label, **Megatraveller** is based on the GDW science fiction role playing series of the same name.

The essence of this game is the Frontier Wars which pits the Zhodani against the forces of the Third Imperium. **Megatraveller** features a highly sophisticated character generation system and plenty of opportunities for tactical combat.

The manual weighs in at 150 pages plus, and offers a wealth of background detail in addition to providing comprehensive playing instructions. The problems with the combat system that afflicted the earlier version have now been corrected in this new, 3.0 version.

Worlds at War

Internecine

Programmed by Lyric Software, **Worlds at War** is the third title to appear on the Internecine label. This is a strategy game for one or two players which takes space naval combat on a tactical level as its theme.

Scenario length ranges from one hour to several days if the campaign game is selected.

The map is randomly generated so each game is different and thus provides fresh challenges.

Worlds at War will be available for the IBM PC and the Amiga, priced at £29.99 and £24.99 respectively. The complexity level is rated at intermediate. Full review next issue.

Hi Sierra!

Stuck in the middle of **Leisure Suit Larry**? And just at that vital moment too. Normally this would entail a phone call to a point some ways west of the Rockies, but no longer. Sierra's UK office is now officially open and that includes a help line for frustrated adventurers. To get assistance for that next mid life adventure crisis just call 0734 303171.

UMS II

Yes, finally. The Universal Simulator (2), for the PC and ST, should be universally available as you read this. The Amiga version will follow in the first week of March. An enhanced 1.2 version is now available. This is more memory efficient and is recommended if you wish to run the Desert Storm scenario (for details of how to obtain the Desert Storm scenario, see the ad on page 22).

The Planet Editor will be available separately in late April at no extra charge to legitimate users. Contact MicroProse for details of how to obtain both these disks.

Getting into the swing of things: Jack Nicklaus Great Courses of the US Open.

Golf crisis solved!

Accolade proudly presents, tra-la-la,**The Great Courses of the US Open**, number four in a series of add-on course disks for use with **Jack Nicklaus Unlimited Course and Golf Design** and **Jack Nicklaus Greatest 18 Holes of Major Championship Golf**.

The new disk includes Pebble Beach Golf Links, Oakmount Country Club, and Baltusrol Golf Club, and will be available for the IBM PC, Amiga, and the Apple Mac family.

Accolade also announces the release of **Road & Car #1** which is an add-on disk for **Test Drive III**. This expansion disk features the new Acura NSX and the Dodge Stealth R/T Turbo. The new scenery is centered around New England but extends to Niagara offering software drivers the unqiue opportunity to test the amphibious qualities of the vehicle.

Virgin territory

Virgin Mastertronic has acquired the rights to five more Infocom titles for their budget label. **Zork II: The Wizard of Frobozz** is another adventure set in the subterranean world of Zork, as is **Zork III: The Dungeon Master**.

Enchanter is set not in the world, but in the tradition of Zork. But there's just no escaping Zork, for **Sorcerer**, the second in the **Enchanter** series, takes the player on a magical mystery tour through the darker side of the Zorkian enchantment.

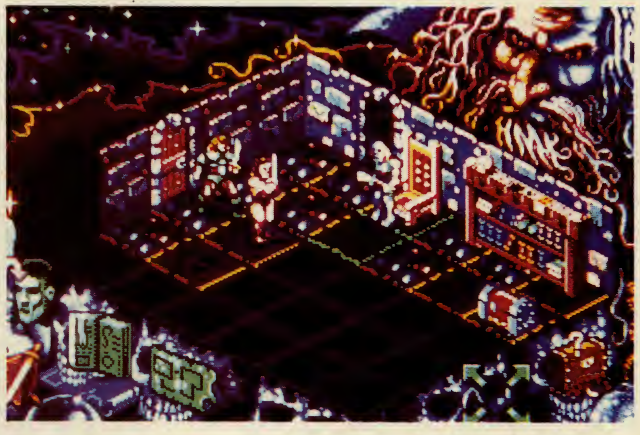
Deadline, a subject close to our own hearts, has nothing whatsoever to do with Zork. This is a 'locked door' mystery with a 12 hour time limit.

Like all the early Infocom games, these are text-only games. All these games will be available on all the formats that count in late March. Price £9.99.

Following the success of **Wonderland** (reviewed in *Strategy Plus* 2), Virgin are to release three of Magnetic Scrolls hits in one package. **Fish – The Seven Deadly Fins** features an inter-dimensional group of anarchists being hunted by a goldfish – surreal laugh. **Corruption – The City of London** is a fast paced thriller where your only weapons are communication, information, and Fiona Wright. **The Guild of Thieves** sounds like it should be about the City, but isn't. It concerns robbing the Kerovnian bank, a castle, and a nearby village in order to join the eponymous guild.

The Magnetic Scrolls Collection (Vol 1) will contain all three games and will be released in March on the IBM PC and will retail for £34.99. The ST and Amiga versions will be released in April at an RRP £29.99.

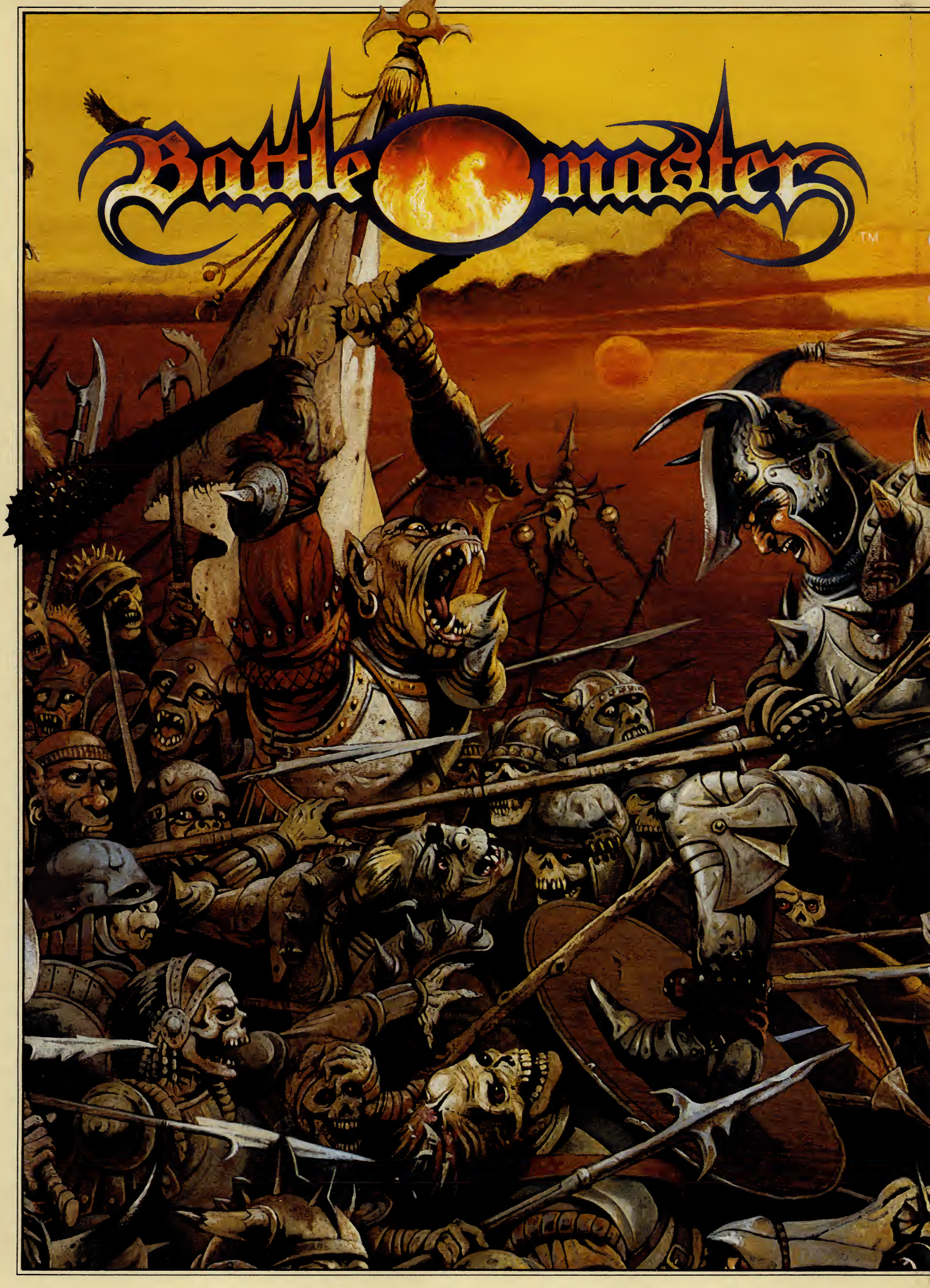
For the latest boardgame news, plus reports of the Earl's Court and Nuremburg Fairs, please turn to page 60



HeroQuest: ever had the feeling someone's watching you?

Hero sandwich

Milton Bradley's best selling boardgame, **HeroQuest** has now been converted into a computer adventure game by Gremlin Graphics Software. Featuring ten different quests, **HeroQuest** lets the player take the part of one of four adventurers. Gremlin claim that 'all the elements of the boardgame have been included' (what, even the board?) plus now you can load and save characters as they are developed.


Battle Master
TM

A TIME of MISERY, A TIME of BLOOD

'A hero is coming from the south who will conquer the four kings of this sorely troubled land. And amidst the bloodshed and magic, the clash of shield and the glint of steel, the seeds of peace will be sown. When the battle is over a new age begins.'

FOR AS LONG AS ANYONE CAN REMEMBER, ORC, ELF, MAN AND DWARF HAVE BEEN LOCKED IN TERRIBLE COMBAT; THE LAND IS A DESOLATE WILDERNESS REEKING OF DEATH AND DECAY. BUT THE WATCHER HAS PROPHESIED THAT THE AGE OF CONFLICT WILL END WHEN THE CROWNS OF THE FOUR FEUDING KINGS ARE WON AND BROUGHT TO THE TOWER.

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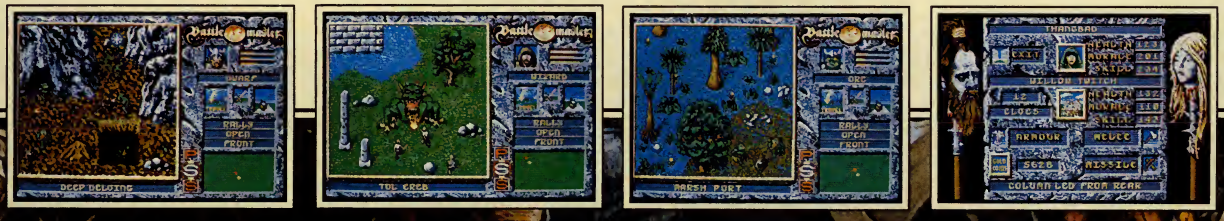
War creates many heroes, but there is only one BATTLEMASTER.



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LORD OF THE RINGS

Scouring The Shire

by Theo Clarke

TOLKIEN's erudite fantasies must be numbered among the most influential books of the twentieth century. His view of fantasy has spawned an entire genre of fiction and directly inspired one of the two biggest changes in the nature of the games industry. That change was the introduction of role-playing games. The success of this style of game largely arises from **Dungeons & Dragons**. The other big change was the introduction of computer games. Interplay have effected the conjunction of all three entities: a computer-based role-playing game based on the first volume of *Lord of the Rings*.

Bilbo has left the Shire and Gandalf has charged Frodo with the destruction of the One Ring. Before Frodo can leave the Shire he must recruit a party to accompany him and must gather a few treasures to protect him. But he cannot just walk around picking up the things he needs. Oh no. He must perform various tasks for various people in the Shire so that they will help him. Once Frodo has got everything he needs he can set out into Middle Earth on his quest to take the Ring to the Crack of Doom.

Dragon's Eye View

The player sees the world as if through X-ray specs from the back of a dragon; we only see the tops of characters' heads and shoulders. All the houses are single story buildings with no roofs. Movement is simple: dragging the character with a mouse or using arrow keys. Everything else is controlled by icons that pop up when the player presses the space bar or a mouse button. The icons are large but the hot spots (those areas of an icon in which the pointer must be placed to activate the icon) are small. This is very irritating. Multiple clicking to initiate processing interferes with the flow of the game. Not that the game does flow. At standard machine speeds the screens scroll jerkily.

Combat further exaggerates the sluggish feel of the game. Each combatant in turn gets a real-time phase in which to make combat actions. This would be slow enough even if the player did not have to click to clear each message. 'Frodo strikes at the orc and misses'. Click. 'The orc hits Frodo for 4 points of damage'. Click. And so on. There is no way to speed up or skip this tiresome process and there are no tactical choices to be made beyond attack or flee. The hobbit heroes can talk to other characters but the exchanges are rudimentary. Essentially the non-player characters ask characters to embark on sub-quests, give a single piece of advice or information, or say that they know nothing more than the querent. Most of the time they know nothing more than the querent. It is all rather disappointing even though the designers have caught the flavour of the books.

The manual gives clear instructions and contains detailed introductions to various aspects of the original story for non-readers or the forgetful. It is obvious that this is the product of real enthusiasm for the source material. The changes to the original plot are obviously intended to do no more than avoid the unfortunate trap of having writing a game with the most expensive and literary hint book ever published. But, once again, a good game design has been marred by a clumsy interface. Almost half of the manual is devoted to paragraphs of text that are too big to fit in the little scroll on screen. Frodo looks at something and is told to read paragraph 210. It all conspires to break the flow.

If this game is a success we can expect another two volumes from Interplay. The manual implies that the player interface will be common to all three games. I am sure that people will buy the game because they love the books. I hope that these buyers will have enough enthusiasm to forgive the interface. More than this, I hope that the designers will have the sense to refine the interface so that it is more forgiving. Perhaps then we can get on with playing what is a basically well-crafted adventure for inexperienced players. SP

Designed by
Interplay Productions

Published by
Electronic Arts

Price £34.99

Available for the PC

CGA, EGA, MCGA, VGA

AdLib, Covox, Game Blaster, Innovation, Roland and Sound Blaster soundboards supported

NEXT ISSUE

MEGATRAVELLER 1

SPELLCASTING 101

BARD'S TALE III

The Thief Of Fate

by Jamie Thomson

THIS IS the third in the Bard's Tale series and really only for true lovers of this system. Character generation is much the same, with a selection of races (gnome, hobbit, human, dwarf, elf, half-elf and half-orc) and character classes (Fighter, Paladin, Magician, Conjurer, Sorcerer, Wizard, Archmage, Monk, Hunter, Rogue, Bard and a couple of new ones – Geomancer and Chronomancer). Stats are the usual – Strength, Dexterity and so on.

Sorcery is what the Bard's Tale specialises in, with more magic using classes and more spells (a huge array!) than in any other game in this genre I have ever seen. There are seven character slots in a party, usually with six characters and the seventh for a wandering monster that might join your group or for some hideously powerful entity your wizard or archmage can summon when they're powerful enough.

The plot involves the town of Skara Brae (as any Bard's Tale player will be all too familiar with) which has fallen into ruin and decay thanks to the ministrations of the Mad God Tarjan, or as he is sometimes known – wait for it, yes, the Evil One! The aim of the game is to find and defeat this guy, and liberate Skara Brae. The rules booklet is a gem. Short easy system rules, nicely laid out, with hints and tips on character generation, combat all placed at strategic points for maximum installation on the hard drive of the brain. Electronic Arts has used its experience in this field to the full on the booklet. It's a pity more wasn't used for the rest of the gameplay.

Once you're ready your party enters the Wilderness, in which it has to find the city and fight its way into the first dungeon. Movement is by keyboard or mouse through a 3-D view both of the outdoors and the dungeon corridors. Encounters come up with a graphic of the monster, and a text display of monster groups. Combat is by keyboard input of your tactical choices and spells, and the 'a' command to commence the combat round. Graphics are bad compared with the **Bard's Tale II** which was altogether crisper and more impressive. The whole thing reeks of a bit of a rush job with a new plot, new monsters, and a lot of new spells tacked onto the **Bard's Tale II** system 'database'.

The first dungeon is just a series of endless random encounters: much too many – just the press of a key and whammo, yet another encounter. I've never used the run away command more often in a CRPG before! "'Oh no, not again," you groan' is one of the preceding lines to an encounter you sometimes get coming up – too true, too dismally true.

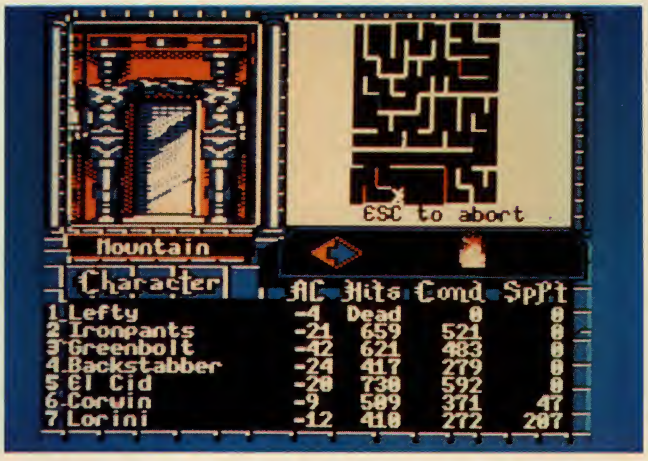
Bard characters can sing songs which have varying effects (one of which is supposed to regenerate spell points but doesn't). A tune is played for the duration of the song which soon becomes extremely irritating – a decent sound board might make this more palatable. You can turn the sound off, but then you have no way of knowing when the song is over – this can make a hell of a difference to survivability especially for low level characters.

Map Problems

One of the main problems with the Bard's Tale series is mapping. The series is notorious for its dull and boring mapping problems, such as areas of impenetrable darkness, traps (considerably more than usual in **Bard's Tale III**), spinners that change the party's direction, teleporters, anti-magic zones so light spells, detection spells and so on go off and have to be tediously recast and even an area where the party get stuck and can't move for a time. These are just irritating, and serve no purpose in advancing the plot, improving flavour or making the game more challenging, mainly because of their recurring nature.

There is an auto-mapping feature, showing a map of the dungeon level you are on, with unexplored areas blacked out. This could have been a godsend but it doesn't display stairs, special squares, traps, spinners and so on when you find them, so I had to make a map of my own anyway.

The worst thing about this game is the spell point system. Magic users will need a decent stock of points to survive the dungeon, but spell point regeneration is incredibly slow (to regenerate a character back up to, say, 150 spell points will take 75 minutes). I almost abandoned the game quite early on because of this. Electronic Arts cannot be reviled enough for this appalling design error!


ESC to abort
Mountain
Character AC Hits Cond SpPt
1 Lefty -4 Dead 0 0
2 Ironpants -21 659 521 0
3 Greenbolt -42 621 483 0
4 Backstabber -24 417 279 0
5 El Cid -20 738 592 0
6 Corvin -9 589 371 47
7 Lorini -12 410 272 207

Other than this stark, awful mistake, the game appears similar to previous titles in the series. As the game progresses it does pick up a little, with a few puzzles thrown in among the continous battle. It is larger in scope with a lot to explore compared to the other two but it relies too much on a huge array of monsters, (over 500), with 80 dungeon levels in seven dimensions, on combat and character power levels to generate its fun. Mind you, it's good combat and your characters certainly get very, very powerful! Strictly for fans of the Bard's Tale and hack-and-slay. SP

WE LIKE...

Spirit of Excalibur (All)

Prince of Persia (All)

Altered Destiny (PC)

It Came From The Desert (PC, Amiga)

Bane of the Cosmic Forge (PC, Amiga)

Designed by Mike Stackpole, Brian Fargo, Bill Heineman, Bruce Schlickbernd

Published by Electronic Arts

Price £29.99

Available for the PC CGA, EGA

TRIAL BY FIRE

Quest For Glory II

by Ian Marsh

Designed by
Lori Ann Cole and Corey Cole

Published by
Sierra On-Line

Price £34.99

Available for all formats
Reviewed on PC

Tandy, CGA, EGA, VGA, MCGA and Hercules

Roland, AdLib, Game Blaster sound supported

ALTHOUGH the biog of the designers is enough to make any stout-hearted role-player reach for a barf bag, **Trial by Fire** actually lives up to its claim, at least in part, that it is a role-playing game. The fact that the manual explains that the essence of role-playing is to think like the character at least offers some hope that the game itself will contain the right elements. If only some indication of the personality of each character were provided, rather than a bundle of numbers and character classes, then at last computer role-playing games would be getting somewhere.

Anyone who has already played the first adventure in the **Quest for Glory** series, previously known as **Hero's Quest**, can import the character into **Trial by Fire**. This approach is a nice touch, allowing players to develop some sense of attachment to characters whose identity has already been established. It also means that anyone who does so will probably get a head start on newcomers to the game: Sierra's player interface, especially the command parser, takes a little time to get used to. Newcomers to the game can choose to generate one of three characters: a fighter, magic user or thief. Apart from knowing that fighters fight, magic users use magic and thieves thieve, there is no real characterisation. The goofy *Famous Adventurer's Correspondence School* manual that comes with the game is no real use here either: where it scores, however, is in its brief summary of the land and creatures of Shapeir.

Shapeir is both the name of the land and one of the main cities.

Trial by Fire comes with an essential map of the city of Shapeir without which it is difficult to get around. The setting is Arabian, and the emphasis is on playing in the style of the 1001 nights. Yet many of the people that will be met during the adventure are Katta, a small feline species of talented artisans and merchants. They verge on the unbearably cutesy and are the hallmarks of a designer with an unhealthy fetish about cats. Players who can put up with this sort of stuff, however, can probably put up with the worst aspect of the game: wacky humour.

Keapon Playin

During play, the character will be given a succession of descriptions that use unbearably bad puns, typified by the proprietor of the magic shop who is called Keapon Laffin. Outside your lodgings at the Katta's Tail Inn, there is a fellow of apparently Italian descent who will offer to sell you a map – what he is doing in an Arabian adventure, nobody knows. It smacks of the zoo-like approach of some **Dungeons and Dragons** adventures, especially those that go on to include Pythonesque bridge and swallows scenes. The overall effect is to destroy any sense of a believable role-playing atmosphere.

Players who prefer a more serious approach to their role-playing adventures should take heed of the warning in the box biog, which says designers 'Lori and Corey Cole draw upon a seemingly endless supply of challenging situations, treacherous enemies and zany humor to bring enjoyment to their fans all over the world. Their combined expertise in computers, art, theater and fantasy role-playing enables them to create games that are truly fascinating and a delight to play.' Quite. Read between the lines and it is easy to see what this means.

Accept all this twaddle, and **Trial by Fire** becomes quite interesting. The objective is to find out what has happened to the Arus al-Din, the former Emir of Raseir, Shapeir's twin city, and restore him to his rightful position. Each character type has to achieve this in a different way, solving problems using unique skills. The investigation requires a character to ask plenty of questions about key topics such as the Emir, the cities, magic and so on, all of which are helpfully listed in the rule book. One thing about Sierra games, they tend to have useful examples that help to get a player started.

Map Value

The city of Shapeir itself is a bit of a maze, full of twisty streets that are lined with doorways. Any initial sinking feeling, however, that the adventure involves trudging around these streets should be dispelled by the fact that once the character's money has been changed into the currency of the land, it is possible to buy a map which makes travelling between locations a simple mouse-driven operation of point and click. It's a commendable approach and one that will forestall much anguish on the part of the player. The character still has to rest, sleep, eat and drink, however, in order to survive, and much of the initial part of the game is taken up by ensuring the character knows where to do this and how to find supplies for a journey across the desert.

Interaction with the computer-controlled characters is well handled. Sierra continues to use a simple but effective parser which, provided the player sticks to the guidelines, is enough to elicit information from the inhabitants. It is unfortunate, however, that the information each person is prepared to give is the same each time. Although this is handy if written notes have gone astray, real people change what they say each time they are met, omitting much what they have said before. Getting computerised characters to act in this way would help bring them to life.

That said, the detailed encounters with characters such as the enchantress are nicely handled, and lift the graphic quality of the game out of the rather tasteless and brash scenes of everyday life. Otherwise the game looks a little basic for something that

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RISE OF THE DRAGON

Things That Go Bonk In The Night

by Ian Marsh

Role-players who doubt that computer games can ever create the feel of a 'real' pencil-and-paper game should take a look at **Rise of the Dragon**, which has obviously learned a lot from other games' bungling attempts to pass themselves off as role-playing games. **Rise of the Dragon** itself is just an adventure game, but it has a commendably friendly means of entering commands and a great power to evoke atmosphere.

Part of the game's ability to create a sense of being there is due entirely to its *Bladerunner* style of background. William 'Blade' Hunter, the private investigator whose body and personal habits the player controls, roams the streets and seedy bar of Los Angeles in the year 2053 to find out who killed the mayor's daughter. It's a special assignment from the mayor himself, so Blade cannot expect any help from the police: his allies and liabilities are the pimps, punks and prostitutes of the sleazy city.

Hip Operation

Cyberpunk is a powerful and vaguely hip science fiction background that will be familiar to quite a few of the people who are going to play this game. Dynamix made a smart move by using a familiar background, because it lets a player slip more easily into a game. Quite simply, if a player has read only one cyberpunk novel or seen one film like *Bladerunner* or *Brazil*, he'll be able to pick up the resonances within **Rise of the Dragon**. Gone is the need to read the duff backgrounds that typically accompany games that purport to be about role-playing.

The atmosphere is enhanced by stunning graphics that pitch the player right into the middle of the city, visually helping to suspend disbelief. Close-ups of faces, although best viewed at an impractically long distance from the screen to use the keyboard, are remarkable, giving these computer-controlled characters a sense of identity. Above all, the artwork shows that a PC with 256-colour VGA is a games machine to be reckoned with.

Much of the time, however, the graphics are static. There are a few random animations that attempt to give life to most scenes, but even in the Pleasuredome there is no feeling of the bustle that a large city should have. Not just one but all of the people or creatures in a scene need a flicker of animation to make them convincing, especially on the Em-Way, the free equivalent of a tube service.

The Em-Way is a real boon: it eliminates the need for the player constantly to move his character between locations. Simply point at the destination on the Em-Way map and Blade arrives, with a suitable amount of time deducted for the journey. The same principle is used to travel by hovercar. As Blade picks up information, more locations appear on the map, to be followed up as required. Blade obviously knows his city and this movement system reflects such knowledge; it is a welcome development.

Rise of the Dragon seems caught between the desire to produce a computer comic book and an arcade adventure. The story is introduced in the form of comic book frames, and the theme is repeated throughout the adventure. But at two points in the adventure there are moderately easy jumping and shooting arcade games that are nothing more than a waste of time as well as disk space. Dynamix has included an option to avoid them after a few failed attempts, which surely casts doubt on the wisdom of including such sections in the first place, especially as they are such anti-climactic solutions to key sections of the game. A short shoot-out around a hovercar and tanker loaded with the deadly drug MTZ makes far better and consistent use of the game's interface.

Pass The Parser

Anyone who is tired of wrestling with uncooperative parsers should appreciate this game's point-and-click interface. A few basic mouse or cursor-key controls are used in a versatile manner to find out about objects, pick them up and use them, as well as to converse with people. Conversations are a multiple-choice affair, with a selection of snappy responses listed: if the game were a movie, it would be like choosing which line should be said. Responses still have to be carefully chosen, but at least no one will have to spend hours getting the word order right for the computer to understand what has been said. Blade's lines make him out to be either a charming rogue or an insensitive, hard-hitting, private dick; each approach has its merits, depending on who Blade is talking to. Because they are the character's lines, they also help the player to think himself into the role.

Star Treatment

In addition to talking to people, Blade also has to bribe them or get them to identify objects. Enter Karyn Sommers, who works at the Hall of Records. Karyn is a babe and will remain Blade's girlfriend provided that he can mollify her after standing her up for a date. She provides vital information about people and objects by tapping into the City Hall computer: it goes without saying that her cooperation is vital to the success of Blade's investigation. Lucky old Blade gets to bonk her senseless on the first night of his investigation.

Sex is just one of the adult matters in **Rise of the Dragon** that earns it a

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Designed by
Jeff Tunnell

Published by
Dynamix/Sierra

Price
£34.99

Available for the PC

640K, 10MHz or faster recommended

256 colour VGA, EGA, Tandy

AdLib, Roland and Sound Blaster sound supported

BANE OF THE COSMIC FORGE

Wizardry VI

by Jamie Thomson

THIS IS the latest offering in the long-running Wizardry series, and easily the best. **Wizardry 1: Proving Grounds of the Mad Overlord**, was one of the first CRPGs ever made and was ground breaking at the time (the Space Invaders of computer role-playing). Since then there have been a number of follow-ups, mostly in the same mould, and never really progressing in any significant way. However, **Bane of the Cosmic Forge** (**Bane** henceforth), is a major departure from previous Wizardry conventions in certain areas – thank the Gods, as it was getting dull and samey (despite the novel idea of playing the bad guy for once, in the **Return of Werdna**).

From the top then – the title. Hmm. A joke really, isn't it? Like, what does it mean? The plot – well, at least that's short and sweet. There's one thing I hate about CRPGS and that's a growing tendency to write long and involved plot outlines that you have to read before you get into the computer play – that's why you buy a book – to read it, and a computer game to play it. In **Bane** there were these two bad guys, the evil sorcerer, and the evil king. They ganged up to get hold of this magical pen with which the very fabric of time and space could be changed by writing whatever you wanted into the laws of the universe. They found this, but, as all villains do, they quarrelled. The sorcerer topped the king in a crazed lust for power, but then fell foul of the pen's (ie the Cosmic Forge's) defence mechanisms. Your job is to go deep into the old castle of the king and retrieve the pen.

The rules booklet is badly laid out and poorly written as a tutorial. I was constantly having to leaf through it hunting for specifics that were hard to find. A little logic and organisation would have helped. The book is quite hefty, but does need to be read thoroughly as there are some vital points you must be aware of.

Character generation retains the old Wizardry feel – certain prerequisite stats are needed to join various classes. There are several class additions, giving 14 different character classes to choose from. Characters always have the option of changing class later on, once their stats have risen to qualify for a new profession, something I've always liked about Wizardry. You start the game with the usual six characters, with the usual races plus some new Wizardry additions (elf, dwarf, human etc and rawulf, felpurr, dracon). The spell classes are interesting with a completely new, revised spell list, dispensing with the old Wizardry system.

Dungeon Lookalike

There is the heavy and pervasive influence of **Dungeon Master** all about **Bane**. Graphics have been blocked in with 3-D walls and doors in **Dungeon Master** style, even to the extent of little water fountains, manacles and chains, with candelabra instead of torch brackets. Doors and gates and stairwells can also be found, all horribly reminiscent of the old **DM**. Your party is displayed around the edge of a central viewing area with bars graphs representing Stamina and Hit points. Magic-using characters have a number of points in each area of magic (Earth, Air, Water, Fire, Mental and Magic) with which to cast their spells. The number of points depends on character level, and their total points in the relevant skill. There are skill categories for almost everything including sword, and various other weapon types, ninjutsu (hiding in shadows), the use of artifacts, scouting (the ability to detect unusual goings on), thaumaturgy (mage skill), theology (priest skill), and many more. A character can have up to 100 points in any or all skill areas, and the skills a character has depend on class. These increase with successful use, there are also bonus points to add to skills whenever a character goes up a level. They retain their original skills even when they change class which can lead to some amazing super characters, if you are prepared to play for long enough!

A Spell Of Sleep

Bane uses a spell point regeneration system so characters must be rested in order to regain spell points. This is done **Dungeon Master** style so that the party is inactive (zedding) for a 15 second period while you wait to see whether you are going to be attacked while sleeping. You can watch your stamina bar go up as you sleep. This is really too similar to **Dungeon Master**, and always gets up my nose. Without the **Dungeon Master** real time effect it doesn't generate a sense of anxiety – just boredom. Who wants to sit at a computer screen waiting, especially when to regenerate full points requires 5-10 rests in a row. Thank god there's the occasional fountain from which you can drink and revitalise your energies. Indeed the whole idea of having a Stamina stat is questionable in a system without food requirements. It's merely an annoying thing to have to worry about that doesn't add to game play or game flavour.

Movement and command input is by keyboard only and there are no graphic representations of objects as in **Dungeon Master**. Puzzles are solved mostly by the Search and Use commands or by adventure game style input, with choices given on actions to take. There are a number of characters you can meet during the game with whom you can interact using a very limited parser. This works OK, however, and adds a pleasant dimension to the whole thing (there is even a spell that lets you read the minds of non player characters).

continued on next page

Designed by
D W Bradley

Published by
SirTech Software

Price £39.99 (import only)

Available for the PC and Amiga
Reviewed on the PC

VGA (ie its EGA graphics work with VGA boards) EGA, CGA, Hercules

COUNTDOWN

The Spy Who Framed Me

by Theo Clarke

SCREAMING... I hear screaming... it stops when I close my mouth... my head is pounding... like a jackhammer on pavement. Nausea... it gags me! I must hold my breath till it passes... it's gone. Cold sweat drips down my face. Burning my eyes. Get hold of yourself. Damnit! Think. Look. Observe... calm down. Slow the heart rate... that's a little better... now get up. Aagh! That hurts... I'm sore everywhere! My arms are cut and my head has been rung pretty good. Think... I can't remember. It's all a cloud. Who am I? Where am I? Why am I in this place? Think!! It's no use... It's still a veil I can't pierce...But wait... there is inane thriller music... I am standing in a dreary cell. There is a medical chart at the foot of the steel bed. The chart is for Mason Powers... wait a minute... that's me! I remember... I was a CIA agent in Istanbul... a doctor is going to lobotomise me tomorrow morning... I've got to get out of here... Guard! Guard!

The guard is a pathetic creature. His mind is atrophied by years of hearing repeated synthesised screams. He does not know that he is a sophisticated animated sequence based on digitised images. A terrible waste of top quality computer graphics; an imbecile too dense to understand confronted with a spy too battered to care. Powers is being manipulated by more than just the player. In 96 hours' time the international terrorist group, involved in framing him for the murder of a fellow agent, will unleash global disaster. The clock is ticking (in real time, natch!).

Initially Powers knows nothing but some items, events and information trigger flashbacks. These animated sequences are also high quality digitised animation sequences and many have associated synthesised voices. There is a gritty realism to the game plus a droll turn of humour that creeps in to many of the encounters. Powers's first task is to escape from the CIA prison hospital and race across Europe while avoiding the pursuers who have his murder in mind.

I Got The Powers

The player has just nine action key words with which to control Powers. The agent can look, open, move, get, use, go to or taste objects. He can also talk to people and in some cases he can travel to places. Having chosen the key word with mouse or a single keystroke the player indicates the target object with another single motion. The mechanism is brilliantly simple and is far less restricting than it sounds.

Most of the actions are obvious but the TALK command is the feature that particularly makes the game unique. There is a sub-menu behind this option. The talking Powers can choose to help, hassle, be pleasant to or bluff his subject before asking about known topics or offering an item to the subject. The responses vary according to the sequence of approaches used and while there are some obviously artificial answers such as 'I don't know any more about that. Try another approach', the interaction is rewarding.

Countdown is exciting and entertaining with quite remarkable graphics. It is no surprise that the product does not support EGA graphics or lower. The music and sound effects do not live up to the quality of the graphics and I found myself playing with the sound off after the first few sessions. The game itself is challenging but the designers play fair and there is no savage trickery. Players of all levels of experience levels will find something to satisfy them.

Powers, I love you, but we only have 96 hours to save the world. SP

Designed by
Brent Erikson and Chris Jones

Published by
Access Software

Available for the PC

Price £34.99

VGA, MCGA

Sound Blaster, AdLib and Covox sound boards supported

Bane of the Cosmic Forge, continued

Combat is by command input for each character in combat rounds, with monster groups given in graphic and text format. The graphics are not particularly good considering they are in VGA. Sound can be used but slowed down my system so much (16Mhz but no sound board) that I had to disable it. Battles are quite well done with different options and effects for different weapons (bash, slash, thrust or punch and kick for you martial artists).

One problem is getting on with the plot. Monster types are keyed to areas and you have to solve puzzles or find objects in certain areas. If you get stuck for a while you find yourself wandering about fighting the same old creatures over and over again. However, once you solve a certain puzzle and open that elusive gate, you do get a sense of achievement – it's not an easy game to crack and you must solve certain problems to get on. In fact, I've ground to a halt, unable to continue because I can't get by a single door.

There is no auto-mapping feature which would have been nice and some areas are a pain to map (always the dullest part of games like this) but nothing too difficult to get a handle on. All in all, an interesting attempt to merge aspects of the **Dungeon Master** format with the usual text driven, non-real-time computer role-playing game. I think it works quite well, and is streets ahead of previous Wizardry products. It has a flavour all of its own with some original ideas, taxing the brain as well as the powers of your 15th level mage or whatever. Puzzle solving and monster bashing – what more could you ask for! SP

KING'S QUEST V

Absence Makes The Heart Go Yonder

by Theo Clarke

Designed by Roberta Williams

Published by Sierra On-Line

Available for the PC (Atari and Amiga to follow)

Price £39.99 (PC EGA), £44.99 (PC VGA)

EGA, VGA and MCGA

Roland, Ad-Lib, Sound Blaster and Game Blaster sound supported

THIS IS the fifth and probably the final instalment in the adventures of King Graham of Daventry. It looks and sounds very much more beautiful than the previous episodes but it is correspondingly more expensive and requires bigger, faster computers to display itself to best advantage. Readers who felt that the first four games were worth their money need read no further and should take their dosh to their nearest dealer, pronto. That last sentence may be redundant. **King's Quest** enthusiasts will have already left to continue their adventure. They are in for a bit of a shock. The new game is not simply better looking than previous Sierra games, it is in a completely new league. Those of us who had seen screen shots before the game was released should have known what to expect, but the reality is still breathtaking. The art designers have used traditional airbrushed pictures which they scanned electronically instead of using computer graphics directly. This technique has yielded subtle, fluid images.

Sound Good

The music is rich and varied but Sierra's last few games have raised expectations so high in this area that it almost goes without saying. Initially the player is so enthralled by the images that the ears are forgotten. Sound is greedy for disk space and the detailed graphics are also hungry. The result is a game running to ten megabytes of data. Ten megabytes! That is more than a quarter of most users' hard disk capacity. Fortunately there are various levels of installation and it is possible to run the game with the base system on the hard disk and the individual scenes on floppies. This makes the game possible for those people at the edge of their hard disk capacity, but it is painfully slow. Each new scene has to be loaded in from floppy disk and there is quite a lot of disk swapping at the very beginning.

The game is at the very limit of current PC games hardware. The use of CD-ROM instead of floppy disks may reduce the packaging and permit the use of synthesised speech, but the real limiting factor is the speed with which the game machine can process the software. Waiting for King Graham to cross the screen of a 12MHz PC was tiresome. Things were not much better at 20MHz and few players own a 33MHz machine so this may become yet another game that is best played in the office. Potential players intending to run the game at work may care to note that it is not possible to disable the sound before the end of the introduction.

The introduction is worth watching, however, so office users may prefer to go public and invite their colleagues over to watch and listen. Experienced **King's Quest** players can opt for a brief animated scene in which the wicked magician Mordack magically steals the royal castle of Daventry and the incumbent royal family. Newcomers can watch a long, entrancing summary of the previous four episodes. Sierra has sold over six million copies of these earlier games so the summary is worth seeing.

Fortunately, King Graham was out for a walk in the forest when his home was heisted so he is available to find the lost castle and his family. In this he is assisted by a new-found associate, an owl called Cedric who wears a blue waistcoat. Cedric warns Graham about potential dangers and occasionally drops broad hints. Cedric's advice epitomises the King's Quest philosophy. It is not that the puzzles are easy, more that there are copious clues to assist the player to rapidly solve each problem.

King's Quest has been described as a series of games 'about a guy wandering around talking to people'. This rather negative comment is close to the truth. King Graham helps various characters and they, in turn, help him. If the player attempts to do anything silly the game prevents the action or makes a comment warning of the error or hinting the correct solution.

Obscured Icons

King Graham is controlled by a number of icons but these only become visible and available when the player clicks the mouse or presses the appropriate key. The icons are reasonably self-explanatory but the mechanism is not as direct as was expected. It is satisfying to be able to click on the look icon and on any image to gain a description of the appropriate item, but, unfortunately, many items have an associated red cross which is the visual equivalent of 'Sorry, I don't know anything about that'. Brian Moriarty's **Loom** showed how satisfying 'no-typing interfaces' can be, but **King's Quest V** does not attain the same sophistication in this area. The game is best played with a combination of mouse and keyboard activity. The marketing-speak is true: there is no typing required, but using the keyboard to flick around the icons is preferable to dragging the mouse pointer from the top left corner each time. And that feels like typing to me.

The shortcomings of the interface would be less apparent if the individual puzzle solutions did not involve so many changes of scene. The scenes are sufficiently exciting to merit repeated visits but it would have been nice if it all took less effort.

Finally, it must be said that the game will not be to everyone's taste. Roberta Williams's horror of violence can manifest itself as a fascination with the cute. There are times in **King's Quest V** when the cuteness quotient hits new highs. Big softies like your reviewer and our Editor *(Grrrr – Ed)* have no problem with this sort of thing, but men with serious street credibility may prefer to play in a locked room. It is not merely that individual characters have cute moments: the whole game is a maze of meringue and I, for one, am prepared to eat it until I turn green. SP

ROBERTA WILLIAMS

ROBERTA Williams is one of the founders of Sierra On-Line, and the designer of many games, ranging from **Mystery House** in 1980 to **King's Quest V** in 1990. Here she discusses her company's philosophy and games with the Gamers Forum of the CompuServe Information Service.

CompuServe: It seems that every new line of games from Sierra seem to start with a Roberta Williams game. Do you enjoy being the first designer at Sierra to test out new interpreters, graphics, and music in your games?

Roberta Williams: In one way it's an honour, and in another way it's a lot of pressure. I used to enjoy it and feel that it was my duty to push Sierra into the future, but now I think I wouldn't mind letting other people do the pushing of technology for a while.

*CS: Yeah... Are we going to see more graphics like the ones in **King's Quest V** in other Roberta games?*

RW: All games from now on, including my own, will have beautiful graphics like you've seen in **King's Quest V**. However, now that we're dealing with paintings each game will have a look that's uniquely its own much more so than in the past since it's difficult to have unique-looking graphics with 16-colour computer graphics.

*CS: Roberta, do you know of any other planned games (Like **Space Quest, Police Quest** and so on?)*

RW: Next years line-up is **Police Quest 4**, **Leisure Suit Larry V, Laura Bow II** (from last year's **Colonel's Bequest**), **Space Quest IV** and **Conquests of Sherwood Forest**.

CS: You seem to be using icons more and more in your games. How come?

RW: Well, the answer is really very simple. Future computer owners will have CD based machines which may not have keyboards such as CDI. Plus, Sierra is becoming a world-wide company and it is impossible to do our parsing in other languages. Also, I've noticed in the past that many people are turned off by adventure games because they are so frustrating. They either don't know how to type or they don't know what to type in, even though they have an idea of what they want to do. So, the idea is to take Sierra into the future with CD-based machines and to (hopefully) gather a new audience of adventure players by making the games a little easier to communicate with.

*CS: I like to know if you found it more difficult to design challenging puzzles for the new interface. The example I like to use is the way the elf was captured in **KQV**, I thought that was a great puzzle, but the new interface made it easy to try everything even though the true solution might have been fairly difficult to arrive at.*

RW: First of all I have no doubt that a challenging game could be done using an icon-based interface. I was constrained not only by a lack of time to get the product done, but also by having to design the actual *interface* at the same time! I felt that I could only do so much in the short amount of time that I was given to come up with a new interface, plus design ahead as to how this game is going to work on CDs. Therefore, I didn't add as many alternative solutions as I would have liked to do. Also, the game was deliberately designed to appeal to new adventure game players and I didn't want to make it *too* hard. People like my mother, who would never look at an adventure game before and would *never* try to play one of my games, was instantly captivated by **KQV** because she could easily master the interface and I couldn't pull her off it. I was very happy about that because it shows we can get new people interested in adventure games.

CS: What is the general consensus Sierra as received so far concerning the icon interface? There has been quite a debate on this forum about that.

RW: When I first designed the icon-based interface I expected it to generate controversy amongst our existing audience. We at Sierra have been very surprised at how well it has been accepted. Sales have far exceeded our expectations and we're getting very little bad feedback on it. Perhaps it's doing what we expected it to do which is bringing in a whole new audience of people that felt intimidated by adventure games before.

*CS: I applaud your effort to take Sierra in a bunch of new directions, and I, for one, loved the parserless interface. My question concerns your role as story writer. Which part of the story of **Kings Quest V** was the most challenging and of which part are you most proud?*

RW: I had a hard time coming up with the storyline and I went through several different versions before I found one I liked, although I did know that King Graham was going to be the hero in **KQV**. Once I basically knew what the storyline was going to be it came together pretty fast. Personally, I like Cedric real well, and I also like adding Princess Cassima. Perhaps we'll do something else with her in another game.

CS: Okay, when are the release dates for the '91' games?

RW: **Space Quest IV** is due for release in March; **Larry V** – July or August; **Conquests of Sherwood Forest** – September; **Police Quest 3**

Roberta Willliams made history when she designed Mystery House, the first computer adventure combining text and graphics. Since then she has designed the best-selling King's Quest Series, The Colonel's Bequest, Mixed Up Mother Goose, and others

This is a transcript of a conference that took place December 18th, 1990 in the GAMERS forum on CompuServe. The guest was Roberta Williams of Sierra On-line. Thanks to Guruka Singh Khalsa for providing the transcript.

Questioners were: RoboCop/Sierra Pro!, Marc D Ronick, Guido, Jim Kallio, Hercules, Eeyore/ModemGames, Jesse Scott, Lance Pickup, Mr Adventure, George Kiefer.

– September; **Laura Bow II** – March '92.

*CS: What about **Quest for Glory III**?*

RW: Lori and Corey Cole are starting on it and we hope to release it in early to middle '92.

CS: Roberta, we thoroughly enjoy your games, especially the icon interface, but we got frustrated at being able to go so far while missing a crucial item, and then not knowing how far to backtrack. I think Cedric could have played a good role in telling us we were missing something. Could you comment on that?

RW: Cedric wouldn't know! Cedric is going along with Graham – how could he know what things Graham would need and what he wouldn't need? Actually I considered that at first, but then thought that it wouldn't make sense to have him automatically know what things Graham would need and where he was going since he's going along with Graham on this adventure and in many cases has never been to a particular place himself! Also, I designed this game so that you can never get too far into a new region before discovering that you are missing something and have to go back, so that you never have to go back more than one region. It's impossible to get to the end of the game and find that you are missing something from the very beginning of the game.

*CS: why wasn't as much time spent on storyline as graphics? **KQV** seemed much shorter.*

RW: Actually, I like the storyline – I've always liked it and I don't apologise for it. Also, there is always more time spent on graphics than on storyline – even in movies and cartoons. Graphics take a long time and they aren't easy to do. If the implication is that the graphics are more important to Sierra than the storyline, that just isn't so. I guess everyone has their own opinion. Also, as I stated earlier, this game was deliberately made a little easier to gather a whole new audience of new adventure game players. I don't think people on CompuServe realise how much more experienced they are with these types of games and may perhaps be underrating the game's difficulty. New adventure game players are finding it difficult.

*CS: In my opinion, I figure a lot of people like Sierra mainly because of the graphics, and the storyline is second. I know graphics take longer to put together, I am questioning the thought behind the story. This was my younger brother's first **King's Quest** game and it took him only seven hours to complete. That seems kind of short. I have never spent such little time on an adventure. I like the new interface, but it seems a bit too easy.*

RW: Perhaps your younger brother isn't typical of new adventure game players. We have plenty of people who are stuck in this game and aren't finding it that easy to play. As for an underdeveloped plot; as I stated earlier I actually like the story and don't think it's underdeveloped. Also, when you compare a story from a book to a story from a movie it's never as developed in the film. The storyline isn't secondary to us, and I think the fact that many people feel close to the characters in **King's Quest** and our other games attests to this.

*If you want to compare books, **Wonderland** compares very well to the book, with still graphics, and also **Lord of the Rings**. I just thought this was a step down from previous **King's Quests**, however the graphics were improved five fold.*

*My next question is about **King's Quests** I to IV – are they going to be converted to VGA/SoundBlaster/new interface and if so, when?*

RW: We need to lean on Ken, the marketing Dept at Sierra, and the rest of the development group to get this done! Ken says to mention that both **Space Quest I** and **Larry I** will be available around the middle of next year with full VGA graphics and the new interface. As for **King's Quest**, I think we should do the same for those, don't you?

*CS: Well, I know if there were VGA-required versions of **KQ1-4**, I'd drop $160 bucks pronto. Tell that to your marketing department. Anyway, how about a listen icon added to the interface? Several places could use it.*

RW: We just had a big meeting of all the designers at Sierra about the new interface – and any extensions to it. It was decided that we would consolidate about three of the icons into one – like the save/restore, quit, and slide bar icons so that we would have more room in the icon bar to add specialised icons like 'listen' if the designer wants it.

*CS: In **KQV**, I think the adventure loses some of its quality without the typing in of commands. I was wondering if you were going to keep with the icon interface for the next adventure game(s) in the future.*

RW: Unfortunately the computer world is changing – and Sierra has to change along with it or Sierra won't exist in the future. With the coming of CD-based computers, or CD 'entertainment' machines that will sit on top of the family TV set, we have no choice but to do this. In the past the games were designed around a parser and the cute things that people might try to type in. **KQV** is the first of many new adventure games using the icon-based interface and we will get better in designing games around it. We will learn new ways to give people the fun they deserve.

*CS: Roberta, the first adventure game I played and the one that got me hooked on the genre was **Wizard and Princess** back in 1982 (sigh) on an old Atari 800. I wonder if you still find the writing and creating process as much fun as in those early days?*

RW: I will never tire of creating stories for computers. I have been creating stories all my life – I used to entertain my friends for hours when I was a little girl with my stories. I even had many convinced that they were true! I seem to do this naturally, and I couldn't imagine doing anything else. As far as if it is as much fun as it used to be, it's fun in a different way. I used to be hampered in portraying my stories by clunky graphics, terrible sound, and a limited parser. Now I feel that I am able to bring my stories more to life with the new graphics and sound capabilities. Just wait until speech comes along. The downside is that it is more difficult to get my stories across the way I would like, because I have to work with so different people now.

*CS: What's the planned conversion schedule for **KQV** to the Mac and other machines?*

RW: We're starting to take the Mac real seriously so Ken wants to try to release a 256-colour version of **KQV** before March. Amiga should be out by February and it's not clear whether we'll ever do an ST version.

CS: There's been lots of interesting discussion here on the Forum recently about 'Death in Computer Games' I was wondering whether you folks

have been following it, and whether you have or want to say anything about it?

RW: I believe it is appropriate for an adventure game which is geared for adults (or families – which contains adults), as it accurately mirrors real life and lends a sense of realism. If, for example, you walked out of a space ship on another planet without a space suit you would die! I think that's perfectly appropriate. If a game is written expressly for children, however, I don't think that death is a good thing. I agree with all of the people that have complained about dying to solve a puzzle like the 'desert maze', but I don't agree that death in an adventure game is bad *per se*. I just think it needs to be handled more appropriately.

CS: With Windows becoming popular on the IBM, is that going to cost Sierra any extra effort or design overhead to come to terms with in the future?

RW: We have a version now of SCI that runs under Windows and will be shipping future games with both a Windows and non-Windows version of SCI on the disk. However, when running under Windows the games run slower because of the extra level of graphics in direction. SP

Trial By Fire, continued from page 38

squats in 4.6Mb of hard disk space: there is not the detail that goes into characters' faces in games such as **The Savage Empire**, which admittedly makes use of 256-colour VGA. Visually, therefore, **Trial by Fire** is a little disappointing compared with other computer role-playing games, but it makes up for this in game play.

One fault is that the character can be talking to a stallholder and a passerby can just wander in the way, whereupon he answers a question directed at the stallholder. There is a repeat function that allows a question to be quickly repeated, but it doesn't compensate for the annoyance caused by the computer assuming that the character is talking to the person nearest to him.

The game scores, however, by keeping the character and computer-controlled characters at a recognisable size, allowing arcade-style action when it comes to fighting enemies. The keyboard's numeric pad is used to select three types of strike, three parries and three dodges, which is complicated to start with, but turns out to be a simple and effective means of deciding the outcome of combat. It contributes greatly to the feeling of being involved in fights, rather than watching tiny sprites shooting it out over a plan of the battle area. **Trial by Fire** succeeds at trying to emulate the feel of a one against one fight in real role-playing combat. For this sort of action, it is perhaps worth sacrificing visual detail.

Where the character's fighting abilities enter into such a system, however, it is difficult to say. Is the outcome of a fight dependent on the character's skill or the player's skill at controlling his actions? It might be fairer to assess a character's fighting skill as the player went through the adventure, so that when a fight broke out, the computer could gauge how good the character, as controlled by the player, actually was. A value determined this way would be useful in a sequel, because the level of the computer's ability could be matched to the skill of the player. At the moment, the level of skill seems both arbitrary and useless.

There does seem to be quite an involving adventure in **Trial by Fire**, and it is worth persevering to obtain information to complete the adventure. It isn't real role-playing, but it seems to be as near to it as any computer game can hope to get at the moment. SP

Rise of the Dragon, continued from page 39

cautionary sticker to the effect that the game is recommended for mature players. There is, shock of shocks, also strong language, words that will chill Blade's marrow – softly spoken words such as 'I love you, Blade.' Certainly there is the odd **** and even a **** which would raise the odd eyebrow of any parent who heard their child utter it, but this is an American game whose vocabulary is tame by many a fourteen-year-old's standards. No one even gets to say 'fuck'.

The adult approach to the game contributes greatly to the atmosphere. Blade can be polite when he needs to be, but everyone knows that at points in the equivalent movie the character would threaten and swear at people. It is a realistic approach that helps build atmosphere; anyone whose computer has sensitive ears shouldn't buy the game.

All in all, with the great graphics, entertaining music, passable plotline and highly interactive interface, **Rise of the Dragon** has everything going for it. Anyone would surely be mad to say it isn't a great game.

It isn't a great game.

All those luscious hand-painted pictures have a price: it doesn't take many to make up the seven or so megabytes of hard disk space that **Rise of the Dragon** occupies. The blurb claims that the game has 85 locations, but take out the Em-way stations and the linking scenes and there are markedly less that are relevant to the plot. All this reduces what Blade can do – there can be no more than half a dozen, usually fewer, point-and-click actions in each scene – and so shortens the adventure.

The purely visual interface limits what can be done with each object: waggle enough objects over a scene and it's easy to find out which ones will do what. Apply some common sense as well, and **Rise of the Dragon** becomes easy to solve. There are a few sticky moments, but all the information needed is presented visually and a detective who keeps his eyes open should get enough clues to solve them. It's like real life, of course, but the challenge has been dulled.

A player who is in tune with the background and pays attention to the helpful booklets in the package should be able to solve this game in a week at only a couple of hours' play a night.

Sunset Strip

There are varying degrees of success, but the main aim is to get Blade and Karyn through the adventure unscathed so they can wander off, comic book fashion, into the sunset together. It's possible, but it soon becomes apparent that **Rise of the Dragon** is quite short and needs more locations and a tougher mystery. Although a bigger game has frightening implications for the required amount of disk space, such a sacrifice is necessary for any game that hopes to provide a truly interactive entertainment that visually and emotionally ensnares its players.

Rise of the Dragon – a humble graphics adventure – has a better sense of role-playing than many so-called computer role-playing games do. A truly awesome game could result if Dynamix's approach is pursued. SP

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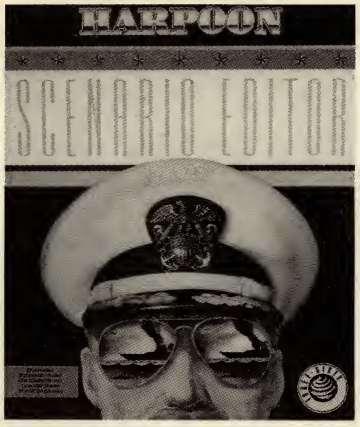
HARPOON

Battlesets One To Three

The Scenario Editor

by Sandy Eisen



THE IBM PC version of **Harpoon** was published in 1990 after several years of delay and anticipation. Happily it was worth waiting for and has received a rapturous reception from both reviewers and players.

Harpoon is a simulation of air and naval warfare in contemporary times. The designers' aims were to be as accurate and realistic as possible, while retaining a perspective appropriate to the commanders involved, and still produce a game which is easy and fun to play. These aims have largely been achieved.

Harpoon can be recommended not only as the best IBM-format computer wargame of 1990, but probably as the best serious (by which I mean non-fantasy) computer game ever published.

Harpoon Battlesets

Harpoon is designed to be used with a series of scenario packages called Battlesets. The first one, covering action in the seas off Norway and around Iceland, was called the Greenland Iceland United Kingdom Gap (GIUK for short) and came with the original **Harpoon** game. So far two further Battlesets are available: North Atlantic Convoys and the Mediterranean Conflict. Both can be recommended as they each extend the scope of the original game in different ways. I shall describe each in more detail later.

Each Battleset includes over a dozen varied scenarios set on the map area appropriate to the topic and including forces from the data pool. If a player has more than one battleset installed, he first chooses one after loading **Harpoon**. After choosing a side, he then selects a scenario from a list which describes each in general terms. The scenario information will now set the scene, inform the player of his objectives and present an intelligence briefing on the likely opposition. Each scenario includes the forces, starting locations, orders and missions for both sides. Realistically the exact forces, positions and plans of the side controlled by the computer are unknown to the player.

When playing a scenario for the first time, the excitement of true 'Fog of War' is superb. However replaying a scenario is both easier and less tense as the player will have a fair idea of what to expect. The program can compensate to a degree by allowing probability-controlled variables in starting locations, unit courses, event timing and even which units are actually present. The degree of variability which has been built into the battleset scenarios is not great. (Much more can be placed in a user-created scenario with the Scenario Editor.)

Playing a scenario on the opposite side to one you have already tried can be even less challenging than simply replaying it. In this situation an astute player may already have near-perfect intelligence and a clear assessment of the opposition's capabilities.

Despite all this, most **Harpoon** players do enjoy replaying scenarios several times as they can still be great fun even if you do know what the enemy will do. Those who consider winning essential may well prefer the replays! Others simply try out alternative strategies and tactics to see how they fare.

Nevertheless, for true-believers in the importance of limited intelligence, hidden movement and the fog of war, the best thrill comes from coping with a new situation unfolding as you play. Hence the importance of the additional battlesets to provide new scenarios, and the Scenario Editor to design them for yourself or your friends.

Roll Your Own Thunder

The **Harpoon Scenario Editor**, published last year in the wake of **Harpoon**'s success, allows new scenarios to be built from scratch. Alternatively, and perhaps more easily for beginners, you can start with any of the Battleset scenarios and change as much or as little as you like. Units of all types can be added to or deleted from groups. The groups and bases can also be changed. Both individual units and the groups of units can be given a percentage probability of appearing. Starting locations and courses can be changed, or multiple alternatives set, each with their own probability. Initial formations need to be set, and orders for speed changes and sensor settings may be programmed. Patrols may also be ordered and these may have variable time delays. Attacks (also with variable delays) may be planned only against enemy fixed bases as all other enemy units are assumed to be undetected at the start. The AI built into the **Harpoon** program must be relied on to launch attacks on any opposing units which are detected. Victory conditions may be adjusted for both sides. This area is well done within the constraints of using either the destruction (or damage) of specified enemy units and/or the positioning of specified friendly units 'on-station'. This latter condition involves designating part of the map area as an objective and so allows the simulation of events such as an amphibious invasion or a shore bombardment.

The Editor uses an interface very similar to the one in **Harpoon**. It works well and is easy to use. But the Editor does have significant limitations in its scope and these are disappointing. The most fundamental problem is that it can only work within the range of the information preset into the battlesets. The information in a battleset cannot be changed at all, nor can the Editor cope with more than one battleset at a time, nor can it transfer data between battlesets. Here are a few examples of what you cannot do:

BATTLESETS
#2 North Atlantic Convoys

Designed by Leslie D Hill, Don Gilman and Larry Bond

#3 The Med Conflict

Designed by Mike & Becky Jones, Larry Bond and Don Gilman

Price £24.99

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SCENARIO EDITOR

Designed by Becky Jones

Price £24.99 (Amiga), £29.99 (PC)

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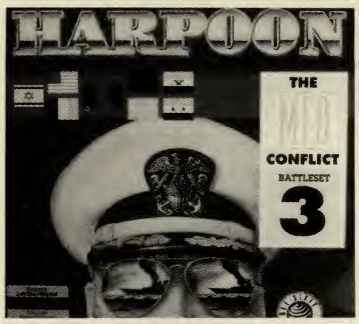

- Change the range or hit characteristics of a missile to reflect upgrades or combat performance.

- Change the weapons on a ship to reflect improvements, or just to experiment in ship design.

- Put more ships of a particular class into a scenario than the number for which the battleset holds names.

- Build a scenario using units from more than one battleset.

This last failing makes the selection of units in each individual battleset particularly critical and limiting. For example I have recently considered the use of the Scenario Editor to model some of the small naval/air engagements which took place at the start of the Gulf War. Obviously none of the battlesets do cover the Persian Gulf, but from the point of view of a tactical scenario, any bit of coastline would do. However British frigates with their Lynx helicopters are available in two of the battlesets, but not in the third which is the only one to include small Soviet patrol boats. As a result no scenario on these lines is possible.

Three-Sixty does acknowledge these missing elements in the documentation for the Editor, and suggests that future versions may overcome them. Personally I am sceptical as I doubt that the data in the current battlesets is held in a format which would allow easy editing. We may have to wait for a complete reorganisation that would be associated with a mythical (so far) **Harpoon 2** or 'Harpoon for the 386'. **Harpoon** itself desperately needs upgrading either to improve the unaggressive and stupid AI, or to add a 2-player (modem or serial link) mode.

The GIUK Gap

Coming with the original game, this battleset sets the standard for all. There is an excellent and varied range of scenarios. These start small and gradually increase in size,length and complexity. The first one engages Norwegian patrol boats against Soviet Nanuchka III 'rocket cutters'. If you have never heard of Nanuchkas, you soon will. The **Harpoon** database allows access to full information on all forces in the battleset. The game can effectively be paused in order to find out about any contact or opponent. This feature and the information it provides is a continuously available tutorial on the hardware on both sides.

The second scenario topic is a small Nato merchant convoy which must be escorted north to Narvik. Just two frigates, one British and one American are available for escort, whilst Nato intelligence warns the player of the risk of any combination of air, surface or sub-surface attacks. This scenario remains one of my favourites despite its small size. Not only are the smaller scenarios faster to play, but they permit a closer identification with the forces involved. Each success is better appreciated while any loss or damage is a real disaster. In a very large scenario the loss of a ship is likely to provoke a reaction more along the lines of 'Ho-Hum, plenty more frigates in that task force.' I think it is more realistic and

Continued page 50

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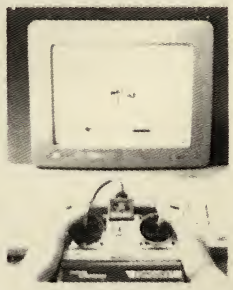

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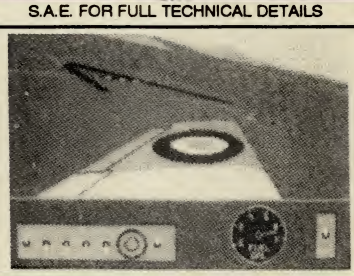

View over Chipmonk wing

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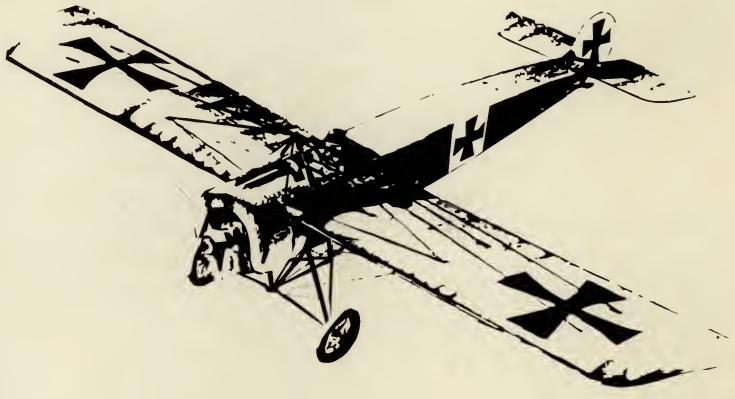
Knight Moves

Tactics in MicroProse's Knights of the Sky

by Ken Lagace of MPS Labs/MicroProse



CERTIFIED pilots at MicroProse had a great deal of input in flight characteristic design. Lead programmer, Scott Spanburg, was very eager to work out a realistic flight modelling system. In real flight, altitude is controlled by throttle and airspeed is controlled by stick or control wheel. This may seem strange at first, but certainly, if the stick is pulled back to gain altitude, the plane will slow down and refuse to climb.

Conversely, when an aircraft is in stable flight, that is straight and level and with steady airspeed, it wants to remain at this airspeed. Any increase in power will quickly add lift and start climbing to maintain its stable flight airspeed. This can be proven with a balsa glider or paper airplane. An accurate throw will make a nice glide. Too fast will make it climb and too slow will make it dive.

Landing a real aircraft is an exercise in careful control of throttle to adjust the descent angle to the landing site. Since an airplane will stop flying at some minimum airspeed, (called its stall speed), pulling back the stick to extend the glide path will only slow the plane down and possibly prang itself in the hard surface below. Try landing a **Knights of the Sky** aircraft by positioning the stick to fly at 60 to 80mph and use throttle to control descent. It acts like the real thing!

The stall speed of **Knights of the Sky** airplanes is around 40mph which is fairly close to the light, high drag airplanes used in the First World War. Climb rates are also similar to the First World War with 780fpm at sea level for the Pfalz D3 to 3000fpm for higher efficiency later planes. Air density has a great deal of influence on climb and this is what dictates an airplanes' ceiling.

Knights of the Sky aircraft climbing ability reduces as you fly higher until around the ceiling level. Then it will climb no more. When taxiing around on the ground, beware of raising the tail too high because you will get a prop strike and wreck your mount. For takeoff, full power will eventually lift your steed, but since you know the stall speed to be 40mph, allow a bit of margin and above 55mph, pull back a bit and maintain this speed or more. Fastest climb is between 70 and 80mph, depending on the particular plane.

The rudder moves the rear of an airplane back and forth. However, moving the back to the left for instance, increases the speed of the left wing and therefore its lift. Real planes can be banked into turns rudder only. This control also permits 'rudder manoeuvres' such as Immelmanns and Retournments popular with some First World War pilots. Pull the stick back to climb and when airspeed is about stall speed, hard rudder will turn you around 180 degrees. This can be done easily from outside view on **Knights of the Sky** (F7 or F8).

We know of one weakness in our flight model. This is the lack of loss of energy in turns. Correcting this didn't fit easily into our calculations. Considering the excellence of all other elements of the model, turn energy was a low priority item. SP

Knights of the Sky was designed by Jeffery L Briggs and is published by MicroProse

It is available for the PC, price £34.99

Harpoon products, continued

involving to really notice and care about your losses. Hence my preference for smaller rather than larger scenarios.

The scenarios continue with ASW actions, more local convoys, and amphibious attacks by both sides on both the Norwegian coast and Iceland. Many scenarios include British bases or forces or both. The battleset data allows bases to be set up in Norway, the northern USSR, Keflavik in Iceland, and many locations all over the UK. Virtually the whole range of current Royal Navy major surface ships are included, as well as the Oberon, Swiftsure and Trafalgar classes of submarine. British aircraft available include Harriers, Sea Harriers, Phantom GR1s, Tornados, Nimrods and several helicopters. The Lynx helicopter is usually more valuable than any other Nato type as with its Sea Skua missiles it is the only one with an anti-shipping capability. Overall those with an interest in UK forces are well catered for in this battleset.

As might be expected, the ranges of US and Soviet air, surface and subsurface units are comprehensive and interesting. A few Norwegian surface types are also included.

In the next issue I will be discussing the North Atlantic Convoys and Mediterranean Conflict battlesets in more detail. SP

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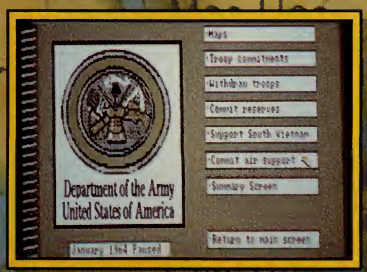

RED BARON

First World War Aerial Combat

by Paul Rigby

Designed by
Damon Slye

Published by
Dynamix/Sierra

Price £34.99

Available for thePC

Tandy, EGA, VGA, MCGA

Roland, AdLib and Sound Blaster sound supported

RED BARON arrives in a massive box containing a wealth of goodies. The game itself is contained on high-density disks of both formats (low density disks are available on request from Sierra (which owns Dynamix), Tel: 0734 303322). Along with the quick reference card comes three, double-sided maps of the Western Front and five specific, detailed arenas within it (such as London Region, Paris and Verdun).

Finally, the *pièce de résistance*, the manual. Friends... this manual is a work of art. It could easily be sold, in its own right, as a book. Spiral-bound and containing 200-pages the quality of the publication surpasses any manual I have ever seen – including those from the likes of Lucasfilm. As well as a systematic history of the air war, the pilots and aircraft there is, for once, a relevant look at flight as it applies to the aircraft *simulated*, instead of the general account you normally receive. Manoeuvres, tactics and specifications are followed by a section of beautiful colour plates depicting side views of the aerial combatants.

After installation there is an immense choice of how to play the simulation. Choosing to dogfight a famous Ace, for example, brings up a secondary menu showing each Ace's photograph (when selected) plus a resume of their achievements, and so on. Each Ace has their own specific tactics (Albert Ball liked the head-on, 'chicken' approach, Richthofen never looped his aircraft, and so on). Dynamix has programmed all of the relevant artificial intelligence (AI) to give you a realistic challenge. This attention to AI runs throughout the simulation and is one of the primary features that sets it apart from the majority of the competition.

Aces High

After selecting an Ace opponent, a number of parameters can be changed. You are able to change the aircraft flown, the Ace's aircraft, the place of battle (over the Front, over German territory, and so on), altitude, you can set the position of the sun and the wind/sky conditions. This choice offers a multitude of 'what if' scenarios. How would the Red Baron have performed in a Fokker E.111, for example?

Another area to explore is the single mission. A wide choice is available here. You can fly a limited amount of historic missions or unlimited amount of computer generated missions such as patrolling the Front, bomber escort, Zeppelin hunting, recce escort, balloon defence and offence and dogfighting a squadron. The latter choice asks you what side you will fly for, how many aircraft in your flight group, type of ammo, aircraft type, formation, number of opponents, type of enemy aircraft, quality of allied and enemy pilots and who will be the leader of the enemy pilots (a famous Ace?). A mission review will appear at the end of the mission (as it does will all missions in the game).

The ultimate challenge, however, is the campaign section. With this it is possible to fly an entire war 'career' as a German or British pilot (starting at different points in the war). Events of the war cannot be altered, but the war can be ended with a 'personal victory', as it were. The aim, therefore, is to achieve promotions, medals and aircraft 'kills'. Not being able to alter the war's events (as other simulations offer) is more realistic for the single pilot-play and, in addition, it provides the opportunity to re-live the essential stages of the air war (the Fokker Scourge, Bloody April of 1917).

Up In The World

Although Dynamix won't describe it as such, there are certain role-playing elements in the game. For example, as you progress through the game, increasing in experience and rewards, more responsibility is achieved. Command of a two ship flight will increase to four ships when the rank of Captain is attained. At this stage it is possible to choose which aircraft to fly (instead of being forced to fly 'X'-type aircraft). A wonderful addition, though, is the option to personalise the aircraft by painting it in different colours! Dynamix even allows this option for the British pilot, which was never allowed at the time. However, in the name of 'fun' Dynamix has bent the historical rules a bit – and why not? Incidentally, an option to back up a favoured career is provided, in case of a mishap later. This type of option has been long

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overdue within flight simulations, so a pat on back to Dynamix for that.

Career missions are generated by the computer; just hit the 'Next Mission' option. There is a choice of bases, though, as an aerodrome from an on-screen map can be selected. Transfers are also possible, later on, if experience with a particularly famous squadron is sought. However, there is the possibility that squadrons, upon hearing of your prowess in the air, will extend an invitation to join them. Other, more sinister invitations, may be offered by enemy Aces. The 'duel' will be proposed for a particular time and place. Immense prestige can be gained from a successful duel but it is also the quickest route to death in the even of failure.

Model Flights

The technical aspects of **Red Baron** are, as far as I can see, faultless. Not only have realistic flight models of all of the 28 different aircraft been re-created but such subtleties as structural and engine models have been included. For example, some aircraft can increase altitude faster than others, the rotary engine induced torque that forced the aircraft down when banking to the right. The Sopwith Camel was particularly susceptible to this – many pilots died because they didn't understand and control this 'feature'. However, the Camel's strong engine torque lead to incredible manoeuvrability – especially when banking to the right! As a complement to that manoeuvrability **Red Baron** also gives you rudder control (allowing you to make slip-turns and the like).

Dynamix did not go too far, however. The Camel's nasty habit of stalling and crashing if the fuel mixture was not weakened on take-off has not been included. However, the 'realism' line must be drawn somewhere.

Truth Or Consequences

On the subject of realism, this can be varied to make **Red Baron** as much of a 'game' or 'simulation' as you wish. You can alter the damage taken, weather, guns being jammed, blackouts, carburettor freezing and so on.

One final technical feature is the method of navigation. Map references are given during your mission briefing, but you may find that you will have to look out for ground landmarks to navigate by. The graphics, fortunately, are good enough to allow this. Of course, a compass is also provided to allow directional navigation.

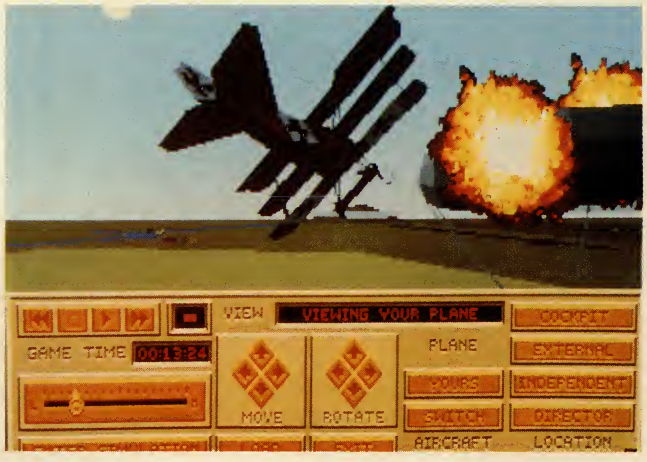
Turning to the more cosmetic aspects of the product and, firstly, the graphics. These are a mixture of polygon '3-Space' and bit-maps giving an atmospheric effect. Cockpits are realistic (the cockpit realism can be varied) with what appears to be digitised copies of real instruments. Multi-view options are also provided. The commands for the multi-views are well thought out. Clicking the joystick's second button toggles from inside to outside viewpoints. The same function keys showing the same camera angles in both modes.

The special effects deserve a special mention. When flying into the sun, the screen 'glares' and you don't see aircraft flying towards you until the last minute; flying in cloud gives a murky, smokey look and, if you are injured, the screen may red-out periodically – as you lapse into unconsciousness. Excellent stuff.

The sound? You'll have to hear it to believe it – with a sound card, that is. Dynamix has used the new Sierra-produced sound drivers. The drivers for the AdLib and Roland are superb, pushing each respective card further than they've ever been. Engine noises (they vary with distance and angle of flight) are very realistic: if the aircraft is overstressed and the wings break off you'll hear a heart-thumping tearing sound, explosions will frighten you to death and gun noises sound very menacing.

One final feature is the video option. Here, it is possible to record and play-back missions with umpteen view and speed options.

Red Baron is the best flight simulation I have ever played – it knocks MicroProse's **Knights of the Sky** effort for six. Dynamix has intelligently combined realism with gloss to produce a magnificent package that deserves to scoop a hat-full of awards. Praise should also go to Sierra for being brave enough to offer financial encouragement and for providing quality distribution. It looks like the Sierra-Dynamix partnership was made in heaven. Long may it last. SP



DOGFIGHT A FAMOUS ACE
SELECT THE ACE TO DOGFIGHT:
Manfred von Richthofen
80
Due to the mystique of his scarlet plane, the Allied pilots referred to Manfred von Richthofen as the Red Baron. He was a master tactician and an effective leader. Discovered by Oswald Boelcke, Richthofen eventually rose to command Germany's most elite air unit, J.G.I. He once wrote, 'I am a hunter. When I have shot down an Englishman, my hunting passion is satisfied for a quarter of an hour.'
CANCEL
SELECT

NEXT ISSUE

MORE HARPOON SCENARIOS

ATP SIMULATOR

DESERT STORM

SIM CITY

Architecture Disks 1 and 2

by Brian Walker

THERE HAS always been some doubt as to whether **Sim City** was actually a game or not. It is true that the economic aspect was added at quite a late stage to specifically address this problem. In truth, the 'is it a game, is it a toy?' argument seemed unimportant. Until now. **Architecture Disks 1** and **2** take up where the original product left off. And there lies the rub. What you get on both disks is more of the same.

The Three Stigmata

Both sets come with a neat install program and will load into the **Sim City** sub-directory without any problem should you have a hard disk. Of course, it is necessary to get past the punitive copy protection system before playing. How about giving *legitimate* users a break, guys?

The opening scenario on '1' is *Future USA*, which professes to take place in 2055, though in fact bears little difference to USA 1991. *Future Europe* also has few distinguishing marks.

Moon Colony finally breaks the green/orange/blue mould, opting for a grey inhospitable terrain that could easily play host to a Philip K Dick novel. A whole new set of disasters are included; meteor showers and extraterristial virus plagues represent the dark side of the moon. Or, if a trouble free life is desired, these can be disabled. Disk 2 contains *Ancient Asia*, *Wild West*, and *Medieval Times*.

Despite the apparently wide ranging locale, the overriding feeling is one of sameness. This may have something to do with buildings being marked 'FD' (Fire Department) and 'PD' (Police Department) making incongruous appearances in most scenarios. And try as one might, it is hard to imagine cowboys being overly concerned with the earthquakes and pollution that form part of the *Wild West* scenario.

It appears that the design brief was to stay as close as possible to the original game, though having to conform to the parameters of the master program must have produced its own constraints. Even so, surprising to see Maxis opting for such a conservative approach especially given the mould breaking approach of the seminal **Sim City.** A nice touch is being able to transpose one setting onto another. Thus, if a dwelling in Ancient Asia has been constructed, it is possible to load a different graphics set and tranform it instantaneously into Future Europe, *par example*.

It would have been nice to have seen the ubiquitous top-down supplemented by a close-ups or side views of the recently constructed edifices. And who would be able to resist peeping into the living room of a 'sim'?

Likewise any strategic additions would be welcome, more so considering the success of **Railroad Tycoon**, and the forthcoming **Castles**. Both these games owe a debt to **Sim City**, but also take the concept several steps on. The box blurb claims that a 'different management style' is required for each scenario. Maybe. But not that different. In fairness to Maxis these are, after all, mere *scenarios*, and as such make no claims about offering something distinct from the original.

Simytery

Of course, to the compulsive urban planner and **Sim City** junkie these carps will not matter one iota. If you are tired of constructing Hereandnowville and are looking to impose your hideous vision on other worlds, then these scenarios will appear heaven sent.

If you can't decide which one to buy I'd recommend Disk 2 (Ancient Worlds) purely on the grounds that it *attempts* to look different, and the graphics are good within the aforementioned parameters. If however, you were looking for something which built on, rather than aped the original, you will be disappointed. Maxis look to be marking time here. It looks as though we'll have to wait for **Sim City 2** for any real insight into the life of the 'sims'. SP

DISK 1 – FUTURE CITIES
Graphics by Richard Payne, Brummbaer

DISK 2 – ANCIENT WORLDS
Graphics by Mimi Dogget, Lee Gaskin, Joanne Ashdown

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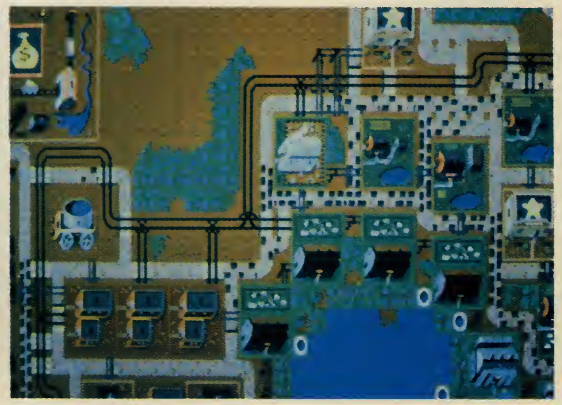

Sim Architectures: Ancient Asia (left) and the Wild West (right)

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CARRIER

Pacific Operations, 1941-1943

by Gordon Sweeney

AS A solitaire board wargame, **Carrier** is one of a rare breed. It concerns historical and hypothetical carrier battles occurring in the Southwestern Pacific of 1942-3. (Jon Southard's last game **Tokyo Express** was set in the same area but was concerned with surface engagements only.) In **Carrier**, the player commands the US naval and air forces against Japanese forces whose location and composition are initially unknown.

A fair amount of equipment is provided for your money. The map not only shows the region in hexes and sea zones but also holds several display boxes and gives numerous rule summaries. The rules and scenarios come in a 68 page book. Aside from a few typos, this is well written and presented with plenty of helpful examples and interesting design notes explaining the historical reasons for particular rules. Many of the charts and tables required for play are supplied on four cards. Most of the 660 counters are game markers but carriers, battleships, cruisers, destroyers and transports are all represented as well as various aircraft types such as the F4F Grumman 'Wildcat'.

Solitaire games pose inherent problems for designers – problems which seldom seem to be overcome. The opposing side should act and react 'intelligently' without being too predictable. If all the game mechanics are to be known to the player (so he or she can operate them) then this is no mean feat. The alternative of having specific hidden instructions for each scenario clearly restricts replay potential. Last but not least, the time and effort required for book-keeping and working through options charts must be kept to an acceptable level.

The fog of war is handled well in **Carrier** by a neat intelligence system. When new Japanese forces are placed on the map at the start of each 80 minute turn, they are at intelligence level 0 (you have no information about them). By conducting aerial searches and/or surface engagements, these forces can have their intelligence increased up to level 4 (full and exact information). Many forces will actually be dummies while others will appear to be one thing but turn out to be another. Deciding how many aircraft to use for searching is tricky. There's no point in finding the enemy carriers if you've nothing left to hit them with and it's no use readying a huge air strike with nothing to attack.

Right Direction

Each Japanese force is colour coded depending on which objective it is heading for – Port Moresby, Guadalcanal or New Hebrides. As in **Tokyo Express**, every sea zone contains colour coded compasses which, with the help of a die roll, determine the movement of all Japanese forces activated in that segment. Thus they will always move in roughly the right direction. There are exceptions in the form of priority rules for different kinds of forces. For example, surface forces will move to support transport forces threatened by US carriers.

The whole game system is, quite rightly, designed from the US player's perspective. You don't see enemy air strikes taking off, you only see them when they swarm over the horizon towards you. This gives the Japanese an air of mystery and unpredictability. Matters of consistency are thoroughly dealt with though – it can take enemy strikes several turns to return to their carriers, refuel and find you again.

There's a lot to take on board in **Carrier**. Thankfully there are six introductory scenarios. Each of these brings in more aspects of the game. Some are quick and easy, others more involved. All are quite entertaining (at least first time around). I did find though that situations can crop up which are only dealt with by subsequent rules. In the standard game, a random generation procedure is used to determine the time period, Japanese objectives and both sides' force levels. After the advanced rules there are historical scenarios such as the battle of Santa Cruz, although, owing to the nature of the game, the Japanese forces may behave very differently this time around. I can't avoid mentioning the 'Final Countdown' option whereby the US player can forego all other units and choose the modern, nuclear powered USS Nimitz equipped with F-14s instead – ridiculous but fun!

Lucky Streak

It's worth mentioning that **Carrier** is a high luck game, but this is entirely realistic. One plane might sink a ship with a torpedo while a huge air strike might fail even to contact its target at all. Played in the right spirit, I find this adds to the excitement – you can hope for the best and fear the worst. On the down side, games of **Carrier** do take several hours to complete. I still find myself flicking through the rule book despite the reminders and charts printed on the cards and map. To be honest, I can't see how the game could have been simplified or speeded up without losing something. In any solitaire game, the designer has to cover all the angles – if there is just one loophole, the player can use it every time.

In two player mode I definitely prefer playing a wargame on a board than on a computer – I like being able to see everything at once and enjoy moving the bits myself. However, when it comes to solitaire games like this, it would be nice to leave all the hard work to a computer and let the player concentrate on making the decisions. As it stands, I feel that many people will be put off by the time and effort required to play **Carrier**. Others, board wargamers like myself with an interest in the subject will get plenty of enjoyment from it. SF

Designed by
Jon Southard

Published by
Victory Games

Price £24.95

One players

WE LIKE...

Airlines

1835

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REPUBLIC OF ROME

The Call Of The Roman Empire

by Mark Green

CLASSIC or monster? After playing six games of Avalon Hill's **The Republic of Rome** I am still not sure of the answer. The game is fascinating, and no doubt I will play it many more times, but is it a classic worthy of being ranked with **Civilization, 1830, Die Macher** or the great wargames?

I am not one to worry greatly about the quality of the components in a game, but even I thought the cards and counters were a little skimpy. The cards are thin and lack weight for a central component of the game system. The counters are small and fiddly, especially the money tokens, while there seem to be a huge number for the quantity we used in any one game. Avalon Hill would have done better producing less quantity and more quality.

Mixed Bag Of Denarii

All is not doom and gloom, however. The board is fine with all the charts and tables clearly laid out. The map of the Mediterranean world is of no practical use but adds a nice geographical centre point to get you in the mood. The military unit counters and political appointment counters are excellent. The overall impression is of a mixed bag of good and bad in the components compartment.

The concept behind the game is that each player controls a faction of senators, vying for influence and prestige at Rome. Money, support from knights, political positions, military campaigns, public opinion, all need to be managed to enable one senator to become dominant.

The game is clever – maybe a little too clever. As a player whose interests require good mechanics and tough decision making, **Republic** immediately caught my imagination. The fact that players must cooperate in order for Rome to survive puts a realistic constraint on player competition. Much of the time you have to work together just to avoid the game ending with all the players losing together! This is the outstanding feature of this game.

Senator For Life

There are a number of ways for a player to win **Republic**: by having one senator voted consul for life, by reaching 35 influence points with one senator or by having one senator march on Rome with a rebellious army. Players will therefore be competing to gain income, obtain political posts, gain support from more senators, get appointed as army commander to prosecute a war...

Much of the action takes place in the Senate, in the form of motions put to the vote. The highest ranking official will nominate two senators for Rome and Field Consul, on which there is a vote. This proceeds until two are elected. Then there will be a nomination and vote for Censor, who acts as public prosecutor. Then there may be one or two trials, again put to the vote. Further business will most likely consist of raising further forces (legions or fleets) and appointing commanders and forces to go to prosecute a war.

Senate procedure can be quite lively, and if you like a game with a strong political slant you will like **Republic**. Normally only the highest ranking official can make a proposal but play of a tribune card allows a veto or motion from the floor. As the political appointments gain a senator influence they are keenly fought over. Military command can gain you popularity if you are successful, but beware the poisoned chalice of a suicide mission.

Everyone Loses

The Republic of Rome (ie all the players) can lose if domestic public opinion causes unrest. In our second game the plebs revolted, burned down the Senate and killed all the player senators. Another way for a joint loss is if four foreign wars are simultaneously ignored by Rome. Foreign wars and other events crop up in the main deck of cards. If a sequence of bad cards comes up quickly, things can get tough.

All wars can be successfully fought by Rome but if multiple cards of the same type occur together then it can get difficult. First, Second and Third Punic Wars occurring with the Hannibal leader card is Rome's worst nightmare.

There is a lot to handle in this game, and it deserves its high complexity rating. It is a particularly tough game to learn, but by the second time most players will have mastered the basics. The rules are typical legalese and some important points are hard to locate when referencing. But it is no harder to wade through than **Seige of Jerusalem** or the like.

In the end I think **Republic of Rome** will be played and enjoyed by many gamers. It has a lot of interesting ideas and is a challenging game. The three scenarios: early, middle and late Republics, have a subtly different feel. Some of the senators like Cato, Scipio and Julius Caesar have a glamour all their own. There are some flaws: some mixed quality components and a general feeling of underdevelopment. But given these cautions I have little hesitation in recommending **Republic of Rome** to those who like their games big. SP

Designed by
Richard Berthold

Developed by
Don Greenwood

Published by
Avalon Hill

Price £24.95

2–6 players

FLIGHT CONTROL

Strategy in Airlines, by Alan R Moon

A number of people have commented how **Airlines** is similar to **Acquire**. Well, it isn't hard to understand how this type of talk got started, because I started it.

The fact is that **Airlines** started out as my attempt to design a better **Acquire**, a true classic. But please excuse my arrogance as the game was designed in my youth (back in 1984 *(Shouldn't that be* 1884? *– Ed)*). And before all you **Acquire** fanatics jump down my throat, hear this. In the beginning, the game (originally titled 9RR or Nine Railroads) actually was a lot more like **Acquire**. However, as it developed, most of the similarity disappeared. So much so, that while I still consider **Airlines** and **Acquire** to be the same genre of game, **Airlines** now has its own personality altogether. Whether it is better than **Acquire**, I would certainly not presume to say. All I know is that I'm sorry I told some of my friends about my goal and the initial similarity, because I don't think it is meaningful to compare the published version of **Airlines** with **Acquire**.

Airlines is a game of subtle strategies. The stock and board situations change rapidly during the game and players must constantly adjust their strategies to win.

It is always to your advantage to found an airline, even when you have only one share of stock of the airline, because this is the only type of turn which allows you to both play stock and expand a flight network.

Stock Or Expand?

Each turn you cannot found an airline, you are faced with the tough decision of whether to play stock or expand a flight network for an airline. There are a number of things to consider.

- Is a Score card about to be drawn? There is a lot of luck involved here, but it does help to consider how long it has been since the last Score card was drawn, or in the case of the initial Score being drawn, how many turns have been taken since the game started. It's better to be safe than sorry.

- Do you have multiple shares of stock in an airline? It is usually a waste of time to play just one share of stock, but holding multiple shares of stock in one or more airlines will cost you a lot of points if a Score card is drawn. Better to play them. An exception to this is when the multiple shares are in an airline of which you are already a leading stockholder.

- What is the points situation? If you are behind because of poor Score results, you can't afford *not* to play stock that makes you a leading stockholder in one or more airlines. One bad Score can be overcome, two bad Scores may seal your fate. On the other hand, if you are ahead you can take more chances and not worry so much about a Score card being drawn.

Expand the flight network for an airline in which you are a leading stockholder, especially an airline in which you know your opponents can't usurp your position. For example: if you have played three shares of ELA and have two more in your hand, you know you will always be the leading stockholder in ELA because there are nine shares altogether, so claim routes for ELA every opportunity you get, but don't play the other two shares of stock unless one of your opponents plays enough ELA to tie the three you've already played.

- What will your opponents do if you play stock? Usually, if you play stock it will start a stock playing frenzy, as if your opponents suddenly awaken to the fact that a Score card being drawn is imminent and you are precognitive. Or, it might just have something to do with the basic play and counterplay of the game. For example, if one opponent has played two shares of ITA and another has played one, and you play three shares of ITA, it is likely that one or both opponents will play any ITA shares they have to regain their positions as leading stockholders.

- Is there an airline in which just one player has played stock? If so, this is a dangerous situation. If a Score card is drawn, this player will receive points for having the most shares of stock and the second most shares of stock in this airline. This is a case where playing just one share of stock is not a waste.

Planned Expansion

When you expand the flight network for an airline, it is not always obvious which one to expand, since there is almost always more than one possibility. Again, several things should be considered:

- Assess the overall board situation. In which direction are other airlines expanding and where will competition for routes occur? Remember, except for ITA, each airline is limited as to what type of routes it may claim. Which airlines have you absolutely no interest in and which airlines are you most interested in (keep an eye on how this changes because of the stock situation).

Airlines was designed by Alan R Moon and is published by Abacusspiele, price £20

• Strive for optimal use of your Flight Cards. Sometimes this means placing a marker on a route with the highest numbered open circle equal to or less than the value of the Route Card, because you may not be able to draw another Flight Card with this high a value. Other times, this means placing a marker on a route with the lowest numbered open circle to force opponents to use Flight Cards with higher values to fly the same route.

• Place fill the last open circle to close a route. This prevents other airlines from flying this route and makes sure they don't prevent your airline from flying it. Later in the game, you may be able to box in an airline, leaving it with no connecting routes to expand into.

'Beware of strangers bearing gifts.' This statement aptly describes the unique feature of **Airlines**. Often, an opponent will expand the flight network for an airline in which you are the leading stockholder. This can mean only one of two things. One, the opponent did not have much choice about which route to place a marker, so he had to help you just so he could draw a Stock Card.

Two, the opponent has Stock Cards in this airline and is about to play them to replace you as the leading stockholder. You are faced with deciding which is correct and whether to continue to expand the flight network for this airline or not. If you do and the opponent takes over as the leading stockholder, you will be wasting turns gaining points for yourself. This becomes very confusing when more than one opponent and more than one airline are involved.

A third reason an opponent may 'bear gifts' is to bluff you into not expanding the flight network for an airline in which you are leading stockholder because of the preceding confusion it creates.

Sabotage is risky in the early game. Because the stock situation changes so rapidly, you may sabotage an airline that you later become the leading stockholder in.

In the end game, it can be a weapon to hurt airlines you have no interest in by blocking routes they could otherwise expand into and taking away one of their available markers. In general, sabotage is more prevalent in the two or three player games. In four to six player games, players have less turns during the game and rarely waste them playing just one share of stock.

LIKE MOST designers I've talked to, I hate writing strategy articles. It's a no-win situation, as some smart alec will always find a way to poke holes in any strategy. So take the preceding thoughts as an initial guide and use your experience to expand and replace them. Because finding a new and better way to play is part of what makes games fun. SP

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FAIR'S FARE

Brian Walker reports on the Earl's Court and Nuremburg Fairs

A FEW years ago when I was covering the Earl's Court Toy Fair for a trade paper, I lamented the fact that many games advertised the fact that they contained some element of skill, though subsequent experience suggested otherwise. This made me ponder why, if skill was considered to be desirable, was none present in the games in question.

This year's Fair proved one thing at least: that all such pretence has gone clean out of the twenty-sixth storey window and splat onto the pavement below. The rallying cry was: 'This game requires no skill or intelligence whatsoever'. This was a phrase I heard repeated verbatim at least twice. Fortunately this message has not got through to Gibsons Games. Their centrepiece was last year's German 'Game of the Year' (and ours) **Adel Verpflichtet**, now rechristened **Fair Means or Foul**. Our previous comments that the production would not match up to the German original were unfounded. In fact they are the same, more or less. However, we had not counted on Gibsons to screw up the cover art. Instead of the eccentricity (and elegance) of the teutonic version we now have a cheap looking comic strip, thus alienating the game's natural market while disappointing the **Wicked Willie** crowd. If you are not one of the latter and do not already own a copy, then buy it, for 'Adel', or whatever you want to call it, is one of the best upmarket family games of the last few years.

Gibsons **Sherlock Holmes Card Game** also looked worthy of consideration. This is an original game which should appeal both to card players and boardgamers. Both these games will be available the first week in April.

Another game of possible appeal to our readership was **The Midas Touch** from Spears, another card game but also containing dice.

Of the big boys (or boy, should I say), MB were concentrating on expansion packs for **HeroQuest** and **Space Crusade**, while the doomed Tonka (Parker Bros) launched **The Great Balloon Race**. Whether this will be the last shot from a company whose name is synonymous with games remains to be seen. Death Row looked to have fewer inmates than previous years, though it's hard to imagine many of them being granted a stay of execution. A microcosm of this infamous area could be found on the **Link-Up** stand. 'Ban Boredom – Link Up With **Link-Up**' proclaimed a large handwritten sign. Underneath it were some senior citizens pretending to have a great time 'linking up'. Well intentioned, but fundamentally hopeless.

NUREMBURG

My colleague Ian Livingstone remarked that in Germany games designers get respect, while in the UK (if they're lucky) they'll get shunted off to some marketing type who'll treat them like cranks even though his living depends on their efforts. All very true, but someone appears to have thrown a spanner in the works from the look of the games on display at the Nuremburg Fair. I guess they are allowed one bad year especially after producing some gems last year, but there were some worrying trends. The most noticeable is the number of TV tie-ins. This, surely, is the road to ruin, as the Americans have discovered to their cost. The other trend was the number of soft sex games. Ravensburger led (?) the way with **Party Time** – mild fun the first time, but have you ever tried using a condom twice?

Tired of parties? Then how about a **Love Affair** (Hanse Stadt Verlag)? This was billed as 'the partnership game of lust and love'. Watch out for a full review of this game in our simulation section.

On the face of it the Ravensburger range looked impressive: their lovely little game **Labyrinth** has been souped up and is now **Das Labyrinth der Meister** (Master Labyrinth), and reportedly much improved as a result. Their business game **Playboss** has been sexily repackaged and rereleased (full review soon), plus both Alex Randolph and Wolfgang Kramer were responsible for their 'big' games. So what went wrong? The Randolph game first: **Jagd der Vampire** is, as usual, a tremendous production. The theme too, is a good one. Unfortunately the game itself can be over in as little as ten minutes if you make the right guess (a 5-1 chance). Ravensburger were touting this as the 'game of the year'. If this is the game of the year then my name is Helmut Kohl.

The Kramer game, **Columbus**, is another Cecil B De Mille production job. More bits than an IBM mainframe. However, if Christopher Columbus himself had played the game, America would never have been discovered; he'd have died of boredom before he reached the Azores. This is a game almost totally devoid of excitement, and is easily one of Wolfgang's worst.

What a pity that it could not somehow be married with Avalon Hill's **New World**, which suffered from the opposite problem of having crud components yet a decent game system. Still, Ravensburger did a wonderful job with Flying Turtle's **Shark**. This now has a theme, some new rules courtesy of *Games International*, and new artwork and components. If you don't already have it, this is a 'must buy'. Klee Spiele pursued their policy of recycling Avalon Hill games. Following in the path of **Regatta** was **Speed Circuit** – complete with dials like the original 3M version.

FX Schmid had a lot to live up to after last year's crop. Their best hope looks to be **Bauernschlau,** which deals with the hitherto unexciting world of sheep. This is one of Tom Schoeps 'fence' games which I have always found rather clever, but rather dull. It's got to better than **Girls Talk**,

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however. This extraordinary game is described as being suitable for 2-6. Maybe they are referring to the IQ? Schmid's showcase game is **Dollarfieber** which comes with a sort of battery powered spinner, or a *kalendermarkierstein* if that makes it any easier. This game, like **Girls Talk**, is a license from Western Pacific where it laboured under the title **Race to Riches**.

Anyone who does not possess a copy of Sid Sackson's **Venture** may be interested to know that Schmid are publishing it as **Die Bosse** (that's pronounced '*dee* boss', by der vay). Another economic game to look out for is **Manager** from Hexagames. This is a revival of the Noris Spiele game published in the late seventies, and one that is regarded as a classic of its kind. Some rule changes have been introduced, so we'll be commenting on these as well as the game itself in a future issue.

Abacus, who published Alan Moon's excellent **Airlines**, are returning to the same source for **Pony Express**, which will be released in April. As one who had the privilege of playtesting this game, I can tell you it will be worth the wait. Another of Alan's games, **1869**, is back on the rails again after the success of **1835**. A summer release date is being considered by Hans im Glück maestro, Dr Bernd Brunhoffer. The doctor's former partner, Karl Heinz Schmiel, is working on a six player version of **Die Macher** (known affectionately as 'Die Maggie'). Expect to see this some time next year. Of all the games on show at the fair, the one with the most potential was not German at all, but French. I refer to **Vertigo** from Eurogames and Duccio Vitale, the man behind **Mai '68**. This sophisticated and beautifully made game deals with pollution, but differs from most in that a player can win by pursuing a policy of environmental terrorism (like that favoured by the US and UK governments), as well as playing it 'green'. Eurogames had a really impressive range, from the family game **Le Paresseux** ('Sloth') through to the revamped International Team games.

The overall impression of the show was one of disappointment. There were just too many games – especially those of the type that you pick up, play for ten minutes, and then consign to the place where only spiders visit. How many of these can the market sustain? This is not to say that I expect games companies to produce product of the type that will appeal to our readership. Companies are there to make a profit, not cater to a hobby. For example, **Schoko & Co** is a game much favoured by both myself and several colleagues, yet commercially the game was a flop. Perversely, though, it is important that games like this get made for, ultimately, the prestige that these bring to the industry translates into profit. And the *Spiel das Jahres*? Well, last year was easy, but this year...? It *should* be **Airlines**, but the fact that it is produced by a small company excludes it. I'd like to see **Manager** get something, but that's doubtful too. My instinct tells me that the prize will go to **Master Labyrinth**, even though essentially it is a variant. The results are announced in August, so if you see a new Editor by the name of Helmut Kohl in our September issue... SP

Most of the strange sounding games mentioned in this report will be available from Just Games (see ad) some time this century.

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Wargames stuck in the States

Lots of new wargame releases in the US, but very few filtering through to this country. Mystery surrounds the future of 3W following the sale of its flagship magazine *Strategy & Tactics* to Cummins Enterprises, who own two wargames magazines already.

The software version of Danny Parker's **Hitler's Last Gamble** has been put on indefinite hold. Games that have appeared include **Modern Naval Battles III** – an air supplement to the series. **SS Amerika** – another of the proliferating 'alternate history' games. In the same genre come **NATO, Nukes and Nazis**, and **Mississippi Banzai** from the XTR Corporation which produces *Command* magazine.

A new wargames company, GMT Games, has launched three games to generally favourable reviews. **Airbridge to Victory** takes a look at Operation Market Garden. **Silver Bayonet** is one of the few wargames to tackle Vietnam, and this one allows the player the option of taking either side. Completing the trilogy is **Operation Shoestring** – a command level game of the Guadacanal Campaign.

Clash of Arms Games has two new releases, both of which cover the American Civil War. **Mississippi Fortress** and **Marching Through Georgia** both offer full campaigns and an historical commentary on the war.

Stock car

One of the most sought after games has to be **Nikki Lauder's Formel Eins** from Wolfgang Kramer. The good news is that Milton Bradley are to release it in February under the title **Daytona 500** with a new track and some rule changes. The bad news is that it will not be released in the UK, at least for the time being. However, the San Francisco games shop Gamescape (see ad) will be stocking it so get on the horn right now, and don't forget the time difference.

East of Essen

The Essen Games Fair dates for *Spiel '91* are Thursday Oct 17, thru Sunday Oct 20. The Interteam tourament has proved so popular with our readers that Britsh teams now have to qualify. The heats will be held at a games convention in Brighton, organised by *Strategy Plus* writer Theo Clarke together with his own *Small Furry Creatures Press*. Look out for more details next issue, or telephone 071-732 8028 in the interim.

Friedhelm Merz Verlag, which organises the Essen Games Fair, is planning to start a similar fair in the land once known as East Germany. Possible venues are Leipzig or Potsdam. The first week in November is being mooted as a date. Much will depend on the willingness of the games companies to see this show as a 'loss leader', given the current lack of D Marks over the 'border'.

Bringing home the Baycon

Time for our annual plug for the annual Baycon boardgames convention. Amazingly the convention has managed to retain last year's venue: The Exeter Court Hotel in Kennford, Devon.

The convention takes place Thursday 4th April to Sunday 7th April. To anyone who has not attended before, we can highly recommend a visit. Needless to say, this has nothing to do with the fact that this magazine is sponsoring the *Victor Ludorum* tournament. In effect this is a sort of unofficial British Boardgames Tournament where the results of all games played are totted up and scored accordingly. Nobody takes it terribly seriously, except that is for Mike 'Sumo' Siggins, one of our *ex* writers, who, after coming 77th out of 80 one year, declined to attend the following year lest his performance be made public again. 'I have my reputation to think of,' he blubbered.

Most of the games played fall into the general, rather than wargames category. Newcomers and families all welcome. For further details contact: Bob Mulholland, 48 Mackenzie Drive, Shorncliff, Folkestone, Kent CT20 3LR.

New from AH

Avalon Hill's new games for the year include **Sea Hawks** a Richard Berg design based on naval warfare in the pirate era, while **Attack Sub** is a new card game using the pioneering **Upfront** design by Courtney Allen. Courtney is also working on a contempoarary version of this classic card game. This will be s stand-alone game that will include a mapboard as well as cards. AH will also be releasing a 'beer and pretzels' election game this summer. Work in progress includes a roaring twenties game and a revamp of **Civilization.**

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Biffo the Bear

I must congratulate you on a fine magazine. I am 45 years old and very much a wargame and strategy fan, and have recently 'upgraded' from a Spectrum+2 to Atari ST. I must admit, though, I miss the likes of **Arnhem, Vulcan** and **Desert Rats** which I thought were quite good; unfortunately I haven't seen any similar wargames for the ST. Perhaps you could enlighten me. Has anyone on your reviewing team come across a game called **Debut**? It was given to me as a present last Christmas and I find the manual rather vague although quite thick – or am I being thick?

Sorry for so many questions. Keep up the good work – it's nice to see a computer magazine catering for 'specialists' and not having to wade through a *'Beano'* style publications for half a page of strategy reviews by people who resort to pokes to cheat in the end.

Dennis Warburton
Frimley
Surrey GU16 5DE

*Thanks for your kind comments. Wargames for the ST? We'd recommend **Storm Across Europe, Fire Brigade,** and **Red Lightning**. **UMS II** must also be considered an essential purchase for any wargamer, even without the Planet Editor. Although not a wargame, we'd recommend **Gold of the Americas** also. It's not so much the **Debut** manual that is vague, but the game itself.* The Beano *happens to be one of our favourite comics, but we know what you mean.*

Testimonial

I noticed in the latest issue a letter from R Howarth requesting details of future releases from SSI. May I recommend the Strategic Plus Software catalogue for concise details of all current and planned strategy software.

I can also highly recommend the friendly, helpful and very efficient service provided by Steve Harper the proprietor. I have for some years been using his advance order service which is without doubt second to none. Prices may not be as cheap as other 'discount' mail order firms but you get what you pay for.

Finally many thanks for producing such an excellent magazine.

Colin Cooper
Leigh-on-Sea
Essex SS9 4RG

Blimey! Do you realise that by publishing this eulogy, we won't be able to speak to Steve for a week?

No ST, no comment?

I am concerned about the increasingly slow development of wargames for the ST because of the domination by the US market where the ST has not sold so well as in this country. I am an avid wargamer, particularly naval wargames, and as you well know there is little or no support in this area. However, on the Amiga there has recently been the release of **Harpoon** and **Action Stations** – two excellent simulations. I contacted Internecine about the release of **Action Stations** for the ST and was told it would probably never be released. The point is will the situation get worse? One would hope that the publishers of strategy software designed in America would realise the potential market in this country on the ST. Or is the alternative to sell my upgraded ST (probably at quite a loss) and buy an Amiga or PC?

Dr P Billington
St Columb
Cornwall, TR9 6PB

*Avalon Hill are to release **Third Reich** on all formats later this year, you'll be pleased to hear. They are also working on a computer version of their **Tokyo Express** naval boardgame. On the hardware front, look out for the rumoured PC games machine from Amstrad. And don't be surprised if the Mac makes a comeback as a games machine now that the new entry level machines are selling so well. In the short term, I recommend anyone with an interest in wargames to trade in their ST for an Amiga.*

Only kidding

Why do you claim that *SP* is an adult magazine for kids. Surely, it's a kid's magazine for adults. After all games are primarily the domain of kids, yet I'm sure most of your readers are adults. Make sense?

Jeremy Barrett
Kettering,
Northants NN15 5TP

We are all kids.

Depth charge

You are probably the best thing to ever happen to the local games scene – which is probably why this missive will probably sound really negative. In other words, if I didn't think that what you're doing is important, I wouldn't bother. So please don't write this letter off, it means well...

First of all, if you really intend putting together a *serious* games mag, stop trying to rival the comics in getting your reviews out in days or even weeks of publication – in most cases, a game with sufficient depth to meet with your (our) approval needs a long, long, time to evaluate. If you feel you *must* have an up-to-the-minute coverage, then lets see a quick once-over, followed by a good long article some issues later.

I said *long*, which brings in my second grouse: crap games can be covered in one paragraph, but good ones need a hell of a lot more space than you're giving them now – less, in most cases, even than the comics! I don't think that **Savage Empire**, **Battletech 2**, or **Hidden Agenda** were properly covered in less than a page which you gave them. On the maxi-minus side, I am prepared to bet serious moolah that Colin Harvey's review of **Legend of Faerghail** was written in one evening on the strength of the package blurb.

One last example of what looks like overly hasty, never-mind-the-cut-feel-the-weight-approach to reviewing: some of my mates and I have tried to play **Supremacy**, that much touted strategy game, on a friend's ST. Every single game hung on us, and always during the last few moves; the program disks were replaced three times, and we even tried another ST. The game *still* hangs up. Nobody at *Strategy Plus* ever noticed this little detail?

But some good stuff to end with: congratulations for Paul Rigby's Sub Logic piece in *SP* 2; McMaster's **Stellar Crusade** in *SP* 3; Sandy Eisen's **White Death** in *SP* 4; Ernesto Williams's **Elvira** put-down (hooray) in *SP* 5; the Simon Corvinus column, and the Chris Crawford interview, also in *SP* 5. More, please!

Nick Spurling
Nottingham

*Reviewing games in depth is always a trade-off with meeting deadlines and competing in the market place. I admit we screwed up with **The Legend of Faerghail,** and also with **Lightspeed** (thanks for not mentioning this). Sorry. **Hidden Agenda** was played extensively, as was **Savage Empire.** Without more detailed criticism we can add nothing to this. When it comes to length, big does not necessarily mean better. Nobody at* Strategy Plus *noticed the 'little detail' to which you refer, because we reviewed the Amiga version of **Supremacy** (as was stated) and not the one for the ST. Your letter was not considered negative, but constructive, and was welcomed as such.* SP

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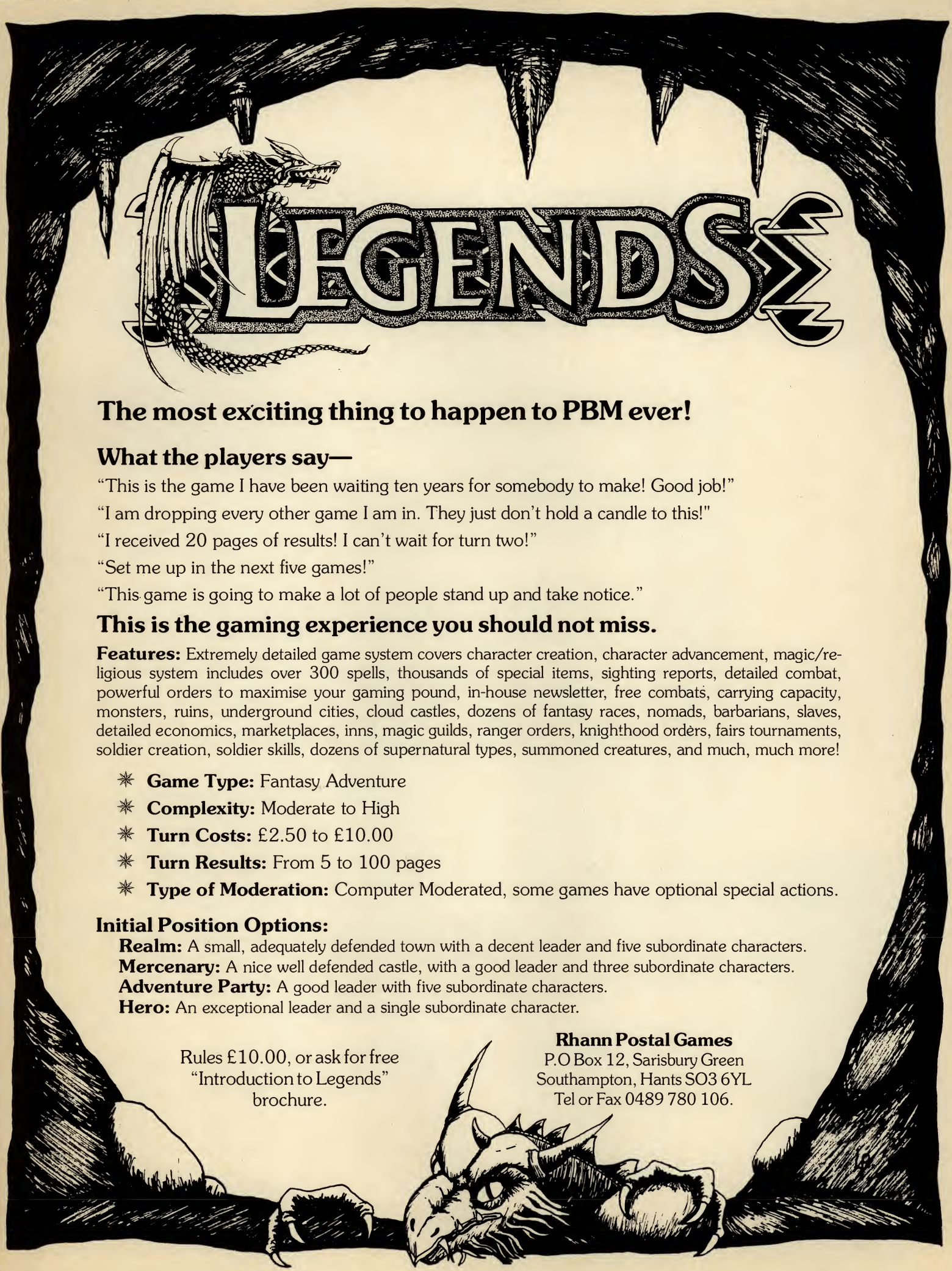

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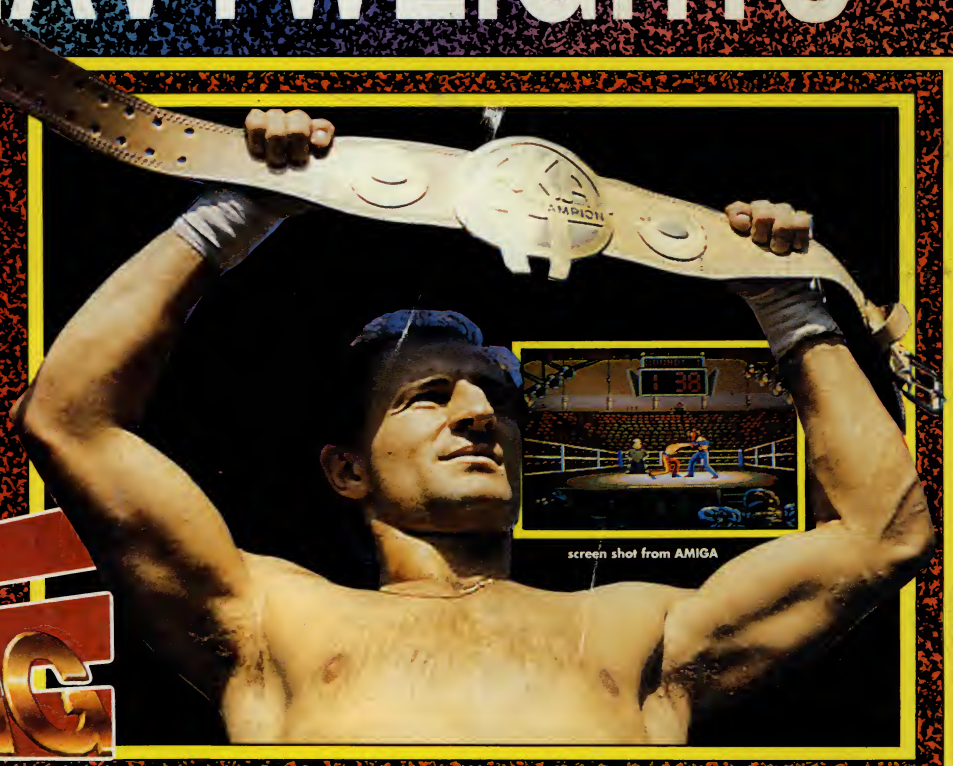

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